Clinical Lectures
ON
THE RECENT EPIDEMIC OF FEVER.

Delivered at St. Thomas's Hospital,

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LECTURE II.

GENTLEMEN,—In my last lecture I briefly described the most striking features of the cases of typhus and typhoid fever which we have recently had under treatment, and showed that they corresponded in general with the description which I had previously given of those diseases. It remains for me to state how far my recent experience confirms or opposes the views previously expressed, that the two diseases are specifically distinct. As the two affections prevailed coincidently, it might naturally have been expected that if not distinct, cases would have occurred which did not present the characteristic features of either form, but rather partook of some of those of each, so as to present an intermediate character. Such, however, was not the case. Each disease, while presenting certain modifications, yet retained sufficiently distinctly its characters to admit of an unhesitating opinion as to its nature; and after more extended observation, I do not hesitate to repeat the expression of my opinion, that typhus and typhoid fevers are specifically distinct. I have met with no instance in which, in a case of fever characterized during life by the presence of a typhous or mulberry rash on the skin, intestinal disease has been detected after death; or in which, after the general features of typhoid had occurred during life, the existence of more or less intestinal disease has not been detected after death. The two affections very closely approximate: typhus, as has been shown, may be attended by symptoms of intestinal disorder, and in typhoid such symptoms may be absent; typhus may be free from symptoms of cerebral disturbance, and typhoid may be attended by such symptoms to a marked extent; but the two affections are nevertheless clearly distinguishable if carefully studied, and no case has occurred in which I have failed to effect a diagnosis, when the patient has been under observation for a sufficient length of time, or in which the subsequent course of the case has shown the diagnosis to have been incorrect.

Allusion has already been made to a case of typhus in which the symptoms of intestinal disorder were unusually marked, and this I will now detail in full.

Isabella P——, aged nineteen, in service at Limehouse, admitted into Elizabeth's ward under my care on the 11th of April, 1862. She had laboured under symptoms of fever for six days, when upon the day after her admission the eruption was out on the skin of the thorax and abdomen. It was somewhat discrete, of a pinkish hue, and faded on pressure. She was directed to have the cinchona and acid mixture every four hours, and to have two glasses of wine in the day, with strong beef-tea at frequent intervals. The following day a glass of brandy was ordered in addition, and as she was very restless, ten grains of Dover's powder were given at bedtime.

On the 14th the following notes were taken:—She is now extremely prostrated; the pupils are very much contracted, and she is extremely torpid. There are sordes on the teeth, and the tongue is dry and brown. Pulse 132 and feeble. She was sick, and vomited some bilious matter yesterday. The bowels were once relieved during the last twenty-four hours, and three times during the previous day; the abdomen is not tumid. The rash is very distinct, and consists of small rounded spots, very slightly elevated; some of them are still of a pinkish hue, and fade on pressure, but others are of a mulberry or purple colour, and do not entirely fade. The amount of stimulus was directed to be increased, and she was ordered a mixture containing five grains of sesquicarbonate of ammonia in an ounce of decoction of bark every three hours.

17th.—She is decidedly worse; has constant twitching of the muscles of the face, and rolls her head from side to side; the conjunctivæ are injected, and the pupils contracted; the teeth are covered with sordes, and the tongue is dry and glazed; there is constant tremor of the hands; the pulse 100, and feeble; the abdomen is somewhat tumid; the eruption is still fully out; it is of a livid colour, does not fade on pressure, and is not now at all elevated. She has retched occasionally, but has not been sick; her evacuations are passed frequently and quite unconsciously, and the motions are fluid. The urine was retained last night, and required the use of the catheter, but she has since passed it freely in bed. She is capable of answering questions, and lies in a constantly wakeful state. Respiration is very hurried and audible; sibilant and sub-crepitant rhonchi are heard in all parts of the chest. She was directed to have enemata, consisting of beef-tea and wine, with a few drops of laudanum; but the diarrhœa continued, and on the 18th she had thirty minims of the tincture of opium in the enema, and retained it; she slept during the night, and was quieter in the morning. On the 19th, as the bowels continued to be much relaxed, the dose was repeated.

21st.—To-day she is looking better, and is upon the whole more intelligent. She had two enemata last night, each with thirty minims of tincture of opium, but did not retain either of them for any length of time. She was quiet, however, during the night, and dozed at intervals, but did not sleep. The tongue is morbidly red, dry, and glazed in the centre; the pulse 112, and feeble. There are still a few spots of a livid colour, but the eruption has to a considerable extent disappeared. There is much tremor of the hands, and the bronchitic rhonchi are still audible in the chest. The abdomen is very tumid; the bowels are acted upon three or four times daily, and the stools are quite fluid. The urine is retained, and amounts to about a pint in the twenty-four hours; it is removed by the catheter. She takes the full amount of wine and brandy, and drinks tea, but cannot be got to swallow the beef-tea.

24th.—She has continued much in the same state as before. The injections are not retained; she still continues to have frequent evacuations, and she does not get any rest. There is some appearance of bed-sore on the left buttock. Her intelligence is very much impaired, and she has a constant tremulous movement of the head. The pupils are contracted; the conjunctivæ injected. The tongue is morbidly red, and somewhat dry; pulse 112, and irregular both in force and frequency. The livid spots are almost entirely gone. She has a loud tracheal wheeze with the respiration. The bowels have been less relaxed, but the stools are passed unconsciously, and the abdomen is very tumid. A slough has formed on the buttock. The urine is partly retained and partly passed involuntarily. It has a specific gravity of 1030, deposits lithates, contains phosphates, and is left slightly opaline after the application of heat and the addition of nitric acid. She gradually sank, and died exhausted the same day.

The post-mortem examination was made on the 25th. The head was not examined. Serum was found in the left pleural cavity, and there was lymph on the pleural surfaces, and some soft adhesions between the parietes and lung. The left lung was somewhat compressed. The right pleura and lung were healthy. The heart was healthy. The spleen was not materially enlarged, but pulpy. The intestines were carefully examined throughout, and were found everywhere free from appearances of disease. Peyer's patches were visible, but quite natural.

In this case, if in any, the intestines might have been supposed to be implicated, and therefore I was most anxious to obtain a post-mortem examination. It will be seen that the result of that examination was entirely in accordance with the previously entertained opinion. Shortly before this case was in the hospital, another, which afforded a striking example of the opposite condition—typhoid fever—without any material evidence of abdominal disease, but with predominant cerebral symptoms, was under the care of Dr. Bristowe; yet it was as clearly a case of typhoid as that just related was one of typhus, and disease of the intestines—very slight, it is true, yet sufficiently characteristic—was detected after death.

Were it, however, occasionally to be the case that patients in whom the typhous rash had been observed during life presented intestinal disease after death, it would not necessarily follow that the occurrence should be regarded as opposed to the theory of the non-identity of the two diseases. It has been shown by Mr. Marson that two of the eruptive fevers may co-exist; and Dr. Murchison has related cases in which typhoid and scarlatina were present at the same time. Very recently you have had the opportunity of observing the same in the hospital.

A patient of Dr. Bristowe, labouring under the usual symptoms of typhoid, took scarlatina, and the eruptions distinctive of the two diseases were present on the skin at the same time. A few weeks ago I had a patient in King's ward who, when admitted into the hospital, had a characteristic typhous rash on the skin, with other ordinary symptoms of the disease, and who in a few days, after an accession of more active febrile disturbance, presented a decided scarlatinous eruption. If, however, scarlatina and typhus, and scarlatina and typhoid, can coexist, why should not typhoid and typhus? There can, indeed, be no doubt that they may. In 1855 a patient was admitted under my care into Jacob's ward, on the 19th of July, having then been ill seven days. He had the symptoms and eruption of typhoid, though in a mild form, and convalescence commenced on the 31st, or the nineteenth day from the first appearance of the symptoms. On the 2nd of August he was again suffering with active febrile disturbance, and on the 4th a typhous rash made its appearance on the skin, which became full and characteristic, and continued to the 13th, and was attended by the usual symptoms of typhus. Convalescence was finally established on the 25th. In this case the patient recovered; but if he had died on or about the 13th or 14th of August, or the eleventh or twelfth day of typhus—a period at which death not infrequently occurs,—it is quite possible that some remains of the intestinal disease might have still existed, as it would then have been only the thirty-second or thirty-third day from the commencement of typhoid; and, as has been shown by cases before referred to, intestinal disease often exists at a much later period. The case would therefore, if imperfectly observed, have been very liable to be misunderstood, from combining the peculiar features of the two diseases, and consequently to have been regarded as proving that they are only modifications of the same affection. This process of reasoning is by no means overstrained; and I think it probable that hereafter cases combining the peculiarities of the two diseases will be placed on record. What I would wish to impress upon you is, that, in deciding as to the nature of any particular case of fever, you must not rely upon any one or two symptoms, but must carefully observe the whole general character of the disease—must ascertain the mode and period of attack, and observe its course and progress, as well as the several symptoms by which it is characterized; and I believe that if you so study each case you will rarely find any difficulty in effecting a diagnosis, or have reason to conclude that the views here expressed as to the specific distinctions of the two diseases are incorrect.

I have not much to add to the remarks which I made in my systematic course of lectures on the treatment of these two forms of fever.

In the cases of typhus the symptoms rapidly advance, and the patients usually become so extremely prostrated as to require at an early period the very free exhibition of stimulus and support; but as the disease, if not attended by any serious complication, usually passes favourably through its stages, and steadily advances to convalescence, the stimulus does not ordinarily require to be long continued, and may generally be reduced and suspended in a comparatively short period.

Typhoid, on the contrary, is much slower in its course, and the degree of prostration in the early stage is less, so that the employment of stimulus is not called for at so early a period, and need not be exhibited to so great an extent; though, from the liability of the disease to be prolonged in an apyretic state, the artificial support must often be very long continued.

In both forms of disease, the extent to which the stimulus must be exhibited must depend upon the degree of prostration; and the quantity required in cases where there is active sinking, from the occurrence of pneumonia, or erysipelas, or sloughs in typhus, or of diarrhœa in typhoid, will often be very large. I cannot, however, but think that there is now some danger of our running into extremes in the use of alcoholic beverages; and when we consider how frequently both forms of fever, but especially typhus, terminates in coma, it may readily be understood that by too free use of these remedies we may aggravate the fatal tendency of the disease, or very greatly embarrass our judgment of the state of the patient. The cases in which stimulus is most beneficial are those in which the skin is not very hot or the pulse very quick; and where doubt is felt as to the desirableness of having recourse to stimulants, it will often be at once removed by watching the effect of the administration of a small quantity while at the patient's bed-side: if he becomes quieter, and his pulse improves in tone, there can be no hesitation as to the propriety of persevering in the use of the remedy.

Opiates are often eminently beneficial by procuring rest in the earlier stages of fever, and especially so at the later periods, when the patient is exhausted by continued wakefulness. An opiate will then often produce sleep, and at once determine convalescence and arrest the febrile action. Their use, however, requires caution in both typhus and typhoid, and especially in the former. I have of late years been much less disposed to employ opiates or any form of astringents to arrest the diarrhœa in typhoid. The rule seems to be that, if not interfered with, the diarrhœa which is ordinarily present in the earlier stages of typhoid will cease of itself, and be replaced by a confined state of the bowels. I seldom, therefore, employ any astringent medicines, unless the diarrhœa be so profuse as to endanger the life of the patient; but rather content myself with exhibiting an amount of support proportioned to the exhausting process which is going on.

In speaking of the exhibition of food, I cautioned you against the use of indigestible food or allowing too liberal a diet during the stage of commencing convalescence in typhoid, while the intestinal disease must be still in progress; and it is impossible to be too strict on this point. But in typhus, in which the bowels are free from disease, while the diet should be light and easily digestible, you may allow a return to solid food at an earlier period and to a more liberal extent than would be advisable in typhoid. The case which I have quoted affords evidence of the benefit which often results, both in typhus and typhoid, from the use of nutritive enemata. In this instance the relief was only temporary, and the case ultimately proved fatal; but I have seen instances in which patients, who could not otherwise be got to take or retain food, were saved by the nutriment so exhibited.

SOME FURTHER OBSERVATIONS ON THE OPERATION FOR THE DIVISION OF THE CILIARY MUSCLE.

BY HENRY HANCOCK, F.R.C.S.,
SENIOR SURGEON TO THE ROYAL WESTMINSTER OPHTHALMIC AND CHARING-CROSS HOSPITALS.

(*Continued from p.* 112.)

WHILST the division of the ciliary muscle, by doing away with constriction, diminishes the tension of the eyeball and the consequent intraocular pressure, it appears to me that the most important result of the operation is its effect upon the blood-vessels, nerves, and absorbents, in removing the obstruction to the circulation and increasing nutrition; whilst a result of almost equal importance is the recovery of the accommodating power of the eye. It is, however, objected that these cannot by any possibility be effected by the operation which I recommend.

Mr. Nunneley observes (THE LANCET, Jan. 26th, 1861):—"It cannot, however, be at all difficult to show that neither the theory nor the practice as applicable to the theory of Mr. Hancock can possibly be true. ..... Supposing the ciliary muscle were really hypertrophied and in a state of tonic spasm, how could it induce hardness of the whole globe of the eye, flattening of the cornea, and much intraocular pressure? ..... The fibres are not circular, but straight, and not more than one-seventh of an inch long. They can have no action whatever upon the sclerotic coat, to which they are not attached posteriorly. They cannot therefore render it hard." And he adds: "But even were this theory of compression by the ciliary muscle as true as it appears untenable, how could a simple puncture in the direction of its fibres interfere with the entire circle of its fibres? A broad transverse incision in the direction of the corneal curve, by dividing the fibres, might act powerfully in proportion to the number of fibres divided; but that a simple momentary separation from each other of two or more adjoining parallel fibres, without any division of their structure (for such must be the effect of a fine, sharp, thin knife), could permanently arrest strong spasmodic action in an entire muscle spread over a large circle it is impossible to conceive."

It is somewhat surprising that a gentleman professing to be an authority on the minute anatomy of the eyeball should so decidedly commit himself to the assertion, that the fibres of the ciliary muscle are not "circular," but "straight." H. Müller has shown that the ciliary muscle consists partly of straight and partly of circular fibres, and it is difficult to understand what Mr. Nunneley actually means when he talks of the ciliary muscle as a set of unconnected straight fibres, not more than the seventh of an inch long, and then immediately

describes it as "an entire muscle spread over a large circle." It will readily be granted that both these conditions cannot obtain. If it is merely an arrangement of unconnected straight radiating fibres, it cannot be an entire muscle; if, on the other hand, it is an entire muscle, then the fibres must be connected, in which case his objection, that in my operation the effect of the incision by "the fine, sharp, thin knife must necessarily be limited to a simple momentary separation from each other of two or more adjoining parallel fibres without any division of their structure," is of no value. But perhaps Mr. Nunneley will inform us how (even if the fibres are unconnected) it is possible so to introduce a fine, sharp, thin knife in the course of these fibres as to cause a simple momentary separation of *more than two* adjoining fibres, without at the same time dividing structure; and, also, how it is possible to make an oblique incision, of an eighth of an inch long, across the ciliary muscle, (as in my operation,) without at the same time cutting through the muscular fibres, even were their arrangement such as described by Mr. Nunneley.

Mr. Nunneley's assertion, moreover, that the fibres of the ciliary muscle are not attached to the sclerotic, is entirely disproved by the investigations of H. Müller, who has traced them from the inner wall of Schlem's canal to their insertion into both sclerotic and choroid. He forgets that a minute portion of the ciliary muscle teased out upon the object-glass of a microscope does not represent that muscle as it exists in the natural state; and he forgets, also, the following description of the ciliary muscle given at p. 175 of his own work on the "Organs of Vision," published in the year 1858:—"If the sclerotic be divided about the third of an inch from the cornea, and the portion with the cornea be carefully detached, we find a whitish-grey circle, about $\frac{1}{12}$ of an inch broad, extending from the junction of the sclerotic and cornea backwards upon the choroid. *It is always a circular belt* even in those animals, &c. *This substance* has received various names, as ciliary circle or ring, ciliary ligament, ciliary ganglion, and *ciliary muscle*, according to the notions which have been entertained of its structure and functions." It is this whitish-grey circle, this circular belt, this ciliary circle or ring, this ciliary ligament, ganglion, or muscle which is cut through in the operation which I have proposed. I am ready to admit that if the part did consist merely of a collection of unconnected fibres, the introduction of a knife between, and in the course of, any two fibres would be useless; but where a circle of radiating fibres—I care not how large that circle may be—is rendered a connected whole by circular fibres and other uniting tissue, the solution of that whole by the division of these circular fibres and connecting tissue, even though the radiating muscular fibres are left untouched, must effect a very important influence over the entire circle, especially where from preceding disease that circle has been deprived of its elasticity, and is consequently constricting the parts passing through it, as in the case of the vessels, nerves, &c., passing through the ciliary muscle.

Whilst, as we have seen, some gentlemen have endeavoured to depreciate the value of this operation, others have assumed to themselves the credit of originality by altering the direction of the incision. I would submit that these proceedings savour in no slight degree of plagiarism, since in all the principle is the same—the division of the ciliary muscle; and whether this object is attained by making the cut obliquely, as I have recommended, or straight, or along the curve of the cornea, it can make but little difference, so long as the muscle is divided and the transparent cornea is not invaded. In the latter case the incision is mostly followed by effusion of blood into the anterior chamber and protrusion of the iris through the wound; and although the blood is usually absorbed in two or three days, the protrusion of the iris causes great and unnecessary pain. These accidents, however, should always be regarded as the fault of the *operator*, and not of the *operation*.

(To be concluded.)

ON A CASE OF

PARALYSIS WITH LOSS OF SPEECH FROM INTESTINAL IRRITATION.

BY DANIEL GIBSON, M.R.C.S., L.S.A.

THE following case shows the remarkable effect upon the nervous system of irritation of the intestinal viscus.

E. B——, aged six years, a cachectic, sallow-looking girl, was brought to my house by her mother on the 18th of April, 1862, who gave the following account:—A week ago she noticed that the child was very peevish and cross; could not walk steadily; was constantly picking her hands and clothes. If set upon a chair she would fall down, if not held by the hand. When she attempted to speak, which she did imperfectly, she would very often bite her tongue; had also to hold it with her finger so as to be able to swallow. I prescribed calomel, six grains; rhubarb powder, half a drachm: to be made into six powders, one to be taken every night and morning. Tincture of sesquichloride of iron, twenty minims; distilled water, three ounces: one tablespoonful three times a day.

April 19th.—Has passed a small chambervesselful of worms: species, Trichocephalus dispar.

21st.—Complete paralysis of the extremities; she is unable to stand; speech entirely gone. To continue with the mixture and powders.

23rd.—A little better in spirits; paralysis the same; has to be fed with a spoon.

26th.—In the same state.

30th.—No alteration. To continue with the mixture and powders.

May 3rd.—Has passed another chambervesselful of worms.

6th.—Paralysis a little better; is able to stand when steadied by the hand. Speech the same; if she attempts to speak she bites her tongue. To continue with the mixture and powders.

8th.—Has passed more worms, and said "mother."

10th.—Paralysis and speech gradually improving; she is able to feed herself.

11th.—Can walk upstairs by herself.

12th.—Has passed more worms. To continue with the mixture only.

14th.—Can walk, but still staggers, and speaks very imperfectly.

16th.—Walks steadily, and speaks very well.

20th.—Can walk as usual, and looks better than she has done for some time.

30th.—She has recovered, and is, as her mother states, in as good health as formerly.

Hull, August, 1862.

A Mirror

OF THE PRACTICE OF

MEDICINE AND SURGERY

IN THE

HOSPITALS OF LONDON.

Nulla est alia pro certo noscendi via, nisi quam plurimas et morborum et dissectionum historias, tam aliorum proprias, collectas habere et inter se comparare.—MORGAGNI. *De Sed. et Caus. Morb.*, lib. 14. Proœmium.

GUY'S HOSPITAL.

CASE OF MOVABLE KIDNEY, IN A HEALTHY GIRL.

(Under the care of Dr. WILKS.)

AT the present time there is an instance in the above hospital of what would appear to be a movable right kidney, which can be distinctly felt occasionally thrust forwards below the liver, and moving within a certain radius. When the hand is placed upon it, and the abdominal parietes are relaxed, it presents in form and size (so far as can be made out) the physical characters of the renal organ. Pressure upon it causes an uneasy sensation, and it then recedes backwards—probably into its natural situation. The right kidney, from its position, is more favourable for recognition when the organ is movable than is the left, for the former lies beneath the posterior part of the right lobe of the liver, and is covered in front by the colon, duodenum, and head of the pancreas. The left kidney, on the other hand, is liable to be mistaken for the spleen.

A movable condition of the kidney is now a recognised phenomenon in medicine, several undoubted cases having been made out during life; and, in one instance, this peculiarity was discovered after death in a patient in whom it had been unsuspected whilst living, the entire trunk being exhibited on one occasion before the Pathological Society by Mr. Durham, for the purpose of showing the extreme mobility of the organ.

The following is a brief history of the case at present in Guy's

Hospital, which was kindly furnished us by Mr. R. S. Jordison, one of the clinical clerks:—

Ann F——, aged twenty-five years, a servant living at Odiham, was admitted into Miriam ward, under Dr. Wilks' care, on the 25th of June. She is a strong, healthy-looking girl, who has never known what a day's illness was. About six weeks ago she first noticed a pain in the left side, when she came up to town and went into St. Mary's Hospital. She remained there for three weeks, and while lifting a kettle off the fire she says that something gave way in the abdomen; and since then she has noticed, as she describes it, "a lump which comes and goes" in the right side.

On examination there can be felt a movable or floating tumour in the right lumbar region, about the size and shape of a lemon. The heart, lungs, and urine are quite healthy; bowels constipated; catamenia regular. She is occasionally troubled with vomiting, which greatly distresses her. Ordered, chloric ether, in peppermint water, thrice a day.

July 3rd.—To take the compound iron mixture, with aromatic spirits of ammonia, three times a day.

29th.—She has had amenorrhœa for seven weeks. The tumour is still to be felt, although it may be a little smaller.

LATERAL CURVATURE OF THE SPINE IN A MOST EXTREME DEGREE; FATAL RESULT; ADDISON'S DISEASE OF THE SUPRA-RENAL CAPSULES.

(Under the care of Mr. POLAND.)

The particulars of the following case will be read with interest; for, independently of the extreme state of distortion, and of disease of the spinal column, there was found after death that particular form of pathological lesion described as peculiar to Addison's disease. It was not suspected during life, as there was no melasma.

Sarah W——, aged twenty-six, was admitted into Charity ward, on 16th April, 1862. She was most frightfully deformed by curvature of the spine, which was due to destruction of the bones, producing angular disease as well as lateral curvature. This came on at the age of six years. During the last year she had great pain in the hip, and was very ill. For this she was admitted. The patient was in so depressed a state that she had to be carried to her bed. She scarcely took any nourishment, and was at last found dead in her bed on the 19th, three days after her second admission.

Autopsy ten hours after death.—The spine was extremely distorted. The back projected at an angle, and here the spinous processes appeared in a line, showing no lateral displacement. In front, however, the portions of upper and lower dorsal which went to form the angle were not in a line, but had a lateral twist, and thus lay side by side. Deep in this angle, where the bodies of the vertebræ had been destroyed, was a quantity of putty-like matter, the remains of an abscess, and in this some hard cretaceous substance. This continued downwards on the right side in the psoas muscle, which was also filled by the same pultaceous material. It was contained in a smooth-lined cavity which had been an abscess. The lungs were very carefully examined, and in one upper lobe there were seen one or two granules, which appeared to be miliary tubercles. The liver was much misshapen. Both supra-renal capsules were destroyed by an albumino cretaceous substance, as seen in Addison's disease. The left was about three times the natural size, and when cut through was found of lardaceous consistence and appearance. In a few places some translucent material was seen; this was tough and fibrous. The remainder was nearly all of greyish opaque material, as usually seen, and in this were observed a few points of a soft dead-white matter. The right capsule was not much above the usual size, was changed in the same manner, but to a greater degree. The deposit was more nodulated, and contained some cretaceous matter. A pedunculated cyst was present on the broad ligament of the uterus.

ST. GEORGE'S HOSPITAL.

LACERATION OF THE RIGHT KIDNEY AND ITS BLOOD-VESSELS; HÆMATURIA; FATAL RESULT ON THE FOURTEENTH DAY.

(Under the care of Mr. POLLOCK.)

CONSIDERING the nature and extent of the renal lesion in the following case, it is remarkable that the patient survived for the period of two weeks. Mr. Stanley has described an instance, however, of recovery after rupture of the ureter, attended with a large accumulation of fluid. In Mr. Pollock's patient the injury extended to the pelvis of the organ, yet there was no effused urine found after death because the vessels supplying the kidney were themselves torn across.

In a previous "Mirror" (THE LANCET, vol. ii. 1860, pp. 134 and 135) we recorded an instance of extensive hæmaturia from suspected disease of the kidneys consequent upon former injury, under Dr. Farre's care, at St. Bartholomew's Hospital; and another of injury to the kidney, from contusion of the abdomen and thorax, which was attended with hæmaturia and collapse, under Mr. Erichsen, at University College Hospital. Both of these made a good recovery.

Henry W——, aged thirty-seven, admitted 30th May, 1862, in a state of collapse. It was stated that he had been thrown out of a cart, (the horse having run away,) and struck his back against a lamp-post. There was severe bruising of the right hip and shoulder, but no fracture could be detected; there was inability to pass urine, which was drawn off, and contained a large amount of blood. He was ordered tincture of opium, gallic acid, and dilute sulphuric acid, every four hours.

Next day he complained of severe pain in the loins; there was a very small quantity of blood in the urine. He was ordered an enema, and fifteen leeches to the loins.

June 1st.—Great pain in the loins; felt sick and low; pulse very weak. Ordered a citrate of potass effervescing mixture every four hours, and calomel-and-opium also every four hours, with three ounces of port wine daily.

3rd.—Can get no sleep; great pain in hypogastrium; urine dribbles from him, accompanied with severe pain; tongue dark-brown, rough and dry; pulse 96.

On the 10th he felt a little better, although some blood was still present in the urine; but on the 13th he was somewhat incoherent in his speech; pain much diminished; countenance anxious. On the 14th he was greatly alarmed at seeing an accident brought in, and afterwards passed a large quantity of blood in the urine. He died at noon.

Autopsy, seventy-three hours after death.—There was evidence of old pleuritic disease on the right side of the chest. There were some patches of fibroid thickening of the aortic valves, and of atheroma upon the vessel itself. The peritoneum was vascular, and covered with recent patches of lymph. The gall-bladder was nearly perforated, so that the bile oozed through; the coats were softened. This was probably a post-mortem change. On the right side of the spine, filling up the whole of the lumbar region, was a hard tumour. The duodenum, pancreas, and small intestines lay in front of this, and were attached by recent adhesions. The tumour lay behind the peritoneum. It was found to consist of a large coagulum of blood, which was posterior to, and in contact with, the right kidney. The coagulum was much lower than the kidney itself. It was black, like currant jelly. The blood had proceeded from a vertical rupture, which passed from behind forwards, severing the branches of the renal vessels at about an inch from the division of the artery. All the large branches were thus divided, and the pelvis laid open. The right kidney itself contained a small, fibrinous, black clot. The right ureter was distended with black clot. The bladder contained a globular, black coagulum, which weighed eleven ounces and a half.

ST. BARTHOLOMEW'S HOSPITAL.

SUPPURATIVE PHLEBITIS, CHIEFLY IN THE LOWER LIMBS, SOME WEEKS AFTER CONFINEMENT; RECOVERY.

(Under the care of Dr. FARRE.)

POORNESS of living and general bad health, in an otherwise delicate constitution, were the predisposing causes to the suppurative phlebitis which followed upon labour in the subjoined case. There were none of the usual well-marked symptoms of phlegmasia dolens, although the inflammation was chiefly confined to the lower limbs. As fast as the abscesses formed they were opened; the health was supported by wine, nourishment, and tonics; and a good recovery followed:—

Caroline N——, aged thirty, was admitted on Dec. 20th, 1861, with general debility. She had been confined eight weeks previously, and whilst carrying her child suffered much from privation of food. Nothing unusual occurred at her confinement. The child lived ten days. Her husband is a cooper, and has been out of work for some time. She had to maintain herself as well as she could by going out washing whilst carrying her child, and believes that she caught cold. Abscesses had formed in various parts of the body, the result of phlebitis, subsequent to her confinement. She was ordered quinine mixture, three times a day.

Dec. 28th.—An abscess was opened in the left thigh. One had formed in the left calf before her admission, and burst spontaneously, with the discharge of half a pint of pus. At that time she was delirious.

Jan. 13th, 1862.—She has an abscess now forming above the knee, and another in front of the right elbow-joint. There is also another forming in the right thigh.

Feb. 3rd.—A week ago the abscess on the right side of the right knee was opened above the joint. Her general health, under the use of good diet and tonics, has greatly improved, and she looks very much better, although somewhat pale. She eats and sleeps well.

In a fortnight from this date she had completely recovered, and left the hospital well.

THE NEW

LICENCE OF THE COLLEGE OF PHYSICIANS OF LONDON.

THE following are the regulations for the new class of Licentiates of the College of Physicians, according to the bye-laws passed this week:—

"The College will, under its charter, grant licences (which are not to extend to make the Licentiates Members of the corporation) to persons who shall conform to the following bye-laws:—

"1. Every candidate for the College licence (except in cases specially exempted) is required to produce satisfactory evidence to the following effect:—Of having attained the age of twenty-one years. Of moral character. Of having passed a preliminary examination in the subjects of general education. Of having been registered as a medical student by one of the bodies named in Schedule A of the Medical Act. Of having been engaged in professional studies during four years, of which at least three years shall have been passed at a recognised medical school or schools, and of having attended the medical practice at a recognised hospital or hospitals, during two years of that period; *and the surgical practice during twelve months;* and of having been engaged during six months in the clinical study of diseases peculiar to women. (The last of the four years of professional study must be passed at a medical school, hospital, infirmary, or dispensary recognised by the College.) Of having studied the following subjects:—Anatomy (with dissections), two winter sessions of six months each. Physiology, two winter sessions of six months each. Chemistry, six months. Practical Chemistry, three months. Materia Medica, three months. Practical Pharmacy, three months. (By Practical Pharmacy is meant instruction in the laboratory of a registered medical practitioner, or of a member of the Pharmaceutical Society of Great Britain, or of a chemist and druggist recognised by the College on special application, or of a public hospital or dispensary recognised by the College.) Botany, three months. *Morbid Anatomy, six months;* (or certified attendance in the post-mortem room during the period of clinical study.) Principles and Practice of Medicine, two winter sessions of six months each. (It is desired that the study of the Principles and Practice of Medicine should comprise the study of the Principles of Public Health.) *Principles and Practice of Surgery, six months.* Clinical Medicine, one winter session and one summer session, or nine months. *Clinical Surgery, six months.* (By Clinical Medicine and Clinical Surgery are intended lectures on cases under observation, or special instruction at the bedside, certified by the teacher. Midwifery and the Diseases peculiar to Women, three months. (A certificate must also be produced of having attended not less than twenty labours.) Forensic Medicine, three months. Of having passed the professional examinations.

"2. Any candidate who shall fail to pass either of these examinations shall not be re admitted to examination until after the lapse of six months.

"3. Any candidate being a 'registered medical practitioner,' whose qualification or qualifications shall have been obtained before January 1st, 1861, having been, with the consent of the College, admitted a candidate for the licence, will be examined on the Principles and Practice of Medicine, Surgery, and Midwifery; but he will be exempted from such other parts of the professional examinations as his qualifications may seem to the Examiners to render in his case unnecessary.

"4. Any candidate who has already obtained the degree of Doctor or Bachelor of Medicine at a University, approved and recognised by the College, after a course of study and an examination satisfactory to the College, shall be exempt from the first part of the professional examination for the licence.

"5. Any candidate who has already obtained the licence of the Royal College of Physicians of Edinburgh, or of the King and Queen's College of Physicians in Ireland, after a course of study and an examination satisfactory to the Examiners appointed by the College, shall be exempt from the first part of the professional examination for the licence.

"6. Each Licentiate shall have the following form of licence given to him, under the seal of the Corporation, signed by the President and by the Examiners:—'I, A. B., President of the Royal College of Physicians of London, with the consent of the Fellows of the same College, have, under the authority given to us by Royal Charter and Act of Parliament, granted to C. D., who has satisfied the College of his proficiency in the science and practice of Medicine, Surgery, and Midwifery, our licence under the said Charter, to practise Physic,* so long as he shall continue to obey the statutes, bye-laws, and regulations of the College relating to Licentiates: in witness whereof we have this day set our seal and signatures. Dated at the College, the day of in the year of our Lord .'

Signed _____ *President.*

_____ } *Examiners.*

"N.B.—This document shall be signed by the Licentiate with his usual signature, and by the Registrar, with the following words:—'I certify that C. D., to whom this licence has been granted by the College, and whose signature is subjoined, has been duly admitted to practise Physic as a Licentiate of the College.'

_____ *Registrar.*

_____ *Licentiate.*

"7. Licentiates of this College shall not compound or dispense medicines except for patients under their own care."

THE HARTLEY INSTITUTION, SOUTHAMPTON.—The office of Curator of this institution, which, as our readers may remember, was founded by a munificent legacy from a gentleman of the name of Hartley, for the promotion of science and literature in the town of Southampton, has been recently filled by the election of Dr. Francis T. Bond, late Professor of Chemistry and Dean of the Faculty in Queen's College, Birmingham. There were fifty-six candidates. The institution will be formally opened by Lord Palmerston in the course of the ensuing month.

OUR FRENCH BRETHREN ON A VISIT TO LONDON.—The International Exhibition has attracted many of our French professional brethren to this metropolis, and some of these have naturally visited our large hospitals. We have reason to know that the officials of these institutions have received foreigners with the greatest courtesy, whilst these are ever anxious to become acquainted with the peculiarities of our practice and teaching. Before, however, putting into print their impressions, they should take care to collect accurate information; thus, we find M. Liégard, of Caen, who describes, in the *Gazette des Hôpitaux*, a visit to St. Mary's Hospital, saying that at the Hospital pupils pay £105 for four years' study, board and lodging; that, with certificates of assiduity from the officers of that Hospital, they undergo annual examinations before the doctors of the faculty of medicine; that after the third or fourth year, if their examinations have been satisfactory, they become doctors of medicine or surgeons, and have £15 to pay for admission; that no preliminary education or degree is necessary; that, in consequence of that, doctors are met at every step, though the expenses of their education require them to belong to a class *a little* above the vulgar. Inquiries in the proper quarters would have saved Dr. Liégard from making so many blunders.

* The meaning of the word "Physic" is defined by Act of Parliament as follows:—"And forasmuch as the science of Physic doth comprehend, includes, and contain the knowledge of surgery as a special member and part of the same; therefore be it enacted that any of the same Company or Fellowship of Physicians, being able, chosen, and admitted by the said President and Fellowship of Physicians, may from time to time, as well within the City of London as elsewhere within this realm, practise and exercise the said science of Physic in all and every his members and parts, any Act, statute, or provision made to the contrary notwithstanding." (32 Hen. VIII., c. 40.)—ED. L.

THE LANCET.

LONDON: SATURDAY, AUGUST 9, 1862.

WHEN the body which is now termed the British Medical Association was formed thirty years since, mainly by the exertions of Sir CHARLES HASTINGS, it held out great promises of becoming a most powerful and useful institution. For some years it pursued a course by which these promises seemed likely to be fulfilled. Its annual meetings were characterized by unity, and its "Transactions" formed most important contributions to medical literature. Its exchequer was capable of meeting all demands, and of showing an annual surplus, which might be applied to the purpose of improving the social and political influence of the profession. Had the Association continued to fulfil the objects for which it was established, what an important position it might now have held! In an evil hour, however, it lost sight of its mission, and became a mere commercial and trading body—it identified itself with a journal. From that moment the influence of the Association began to decline, and at each successive annual gathering the expenses of the weekly publication left them with a deficiency of funds, and gave rise to bickerings and disputes unworthy of the dignity of a highly respectable body of medical practitioners. It could scarcely be otherwise. What did the *Journal* represent? Was it an independent organ of public opinion? Had it any influence whatever upon the progress of those events which have acted so momentously upon the interests of the profession? Certainly not. Inferior in every respect in its literary performance, it conferred no honour upon the Association; as a mere commercial speculation it was a wretched and miserable failure. But this is not the greatest of its evils. It spread discord amongst the members, and was often applied to purposes which had neither professional nor social good in view. Like the old man who fixed himself upon the shoulders of SINBAD, it garotted, as it were, its unfortunate victim. Had the immense sums which have been uselessly expended upon the *Journal* been applied to the real interests of the Association, what an enormous benefit might have resulted! Does the Association really exist for the mere purpose of continuing the publication of a weekly print? This is a question which should be answered frankly and without reservation. It must be answered, and in the interests of the fifteen hundred gentlemen who constitute the Society we would reiterate the questions. Why are so many subscriptions in arrear at the present moment? Why does this melancholy fact reappear annually in the accounts? We commend this subject to the serious consideration of the members of the British Medical Association.

It is well that this annual gathering is in the metropolis. The year of the great International Exhibition, when gentlemen connected with our profession from all quarters of the world are present, no more fitting place could be chosen for such a meeting. But has it been successful? Notwithstanding the *éclat* of the *soirées* at the two great London Colleges, it can scarcely be called a success. We believe that the number of country practitioners present upon these occasions was much less than might have been fairly anticipated. To what cause is this to be attributed? Evidently to the disastrous influence which the *Journal* has had upon the members. With an earnest desire to see the Association placed in that position which its numbers and respectability justly entitle it to hold, we make these comments. That our opinions are shared by a large section of the Association we are well aware.

With regard to the proceedings of the meetings held at the College of Physicians, our readers will be enabled to form an opinion from the copious reports which are contained in this day's LANCET. The address of the new President is characterized by a spirit of fairness and independence which is highly creditable to him. This is a period in which it is necessary for those in responsible positions to speak out. "The times are out of joint." Some of the corporate bodies, assuming to be representatives of the profession, have from a certain point of view sacrificed its interests and ignored the provisions of an Act of Parliament. It is due to Dr. BURROWS to say that he has not shrunk from the performance of an onerous and somewhat invidious duty. Had he been the representative of a great social institution which rested its claims to public support upon its numbers, its influence, and its respectability, with what force would his address have fallen upon the profession! But as the address of a chairman of a body which expends every shilling of its funds in a commercial speculation, it fails in its object.

The many excellent and elaborate papers and cases which were read at the late meeting, if embodied in a volume of Transactions, would form a solid and enduring monument of the utility of the Association. In the pages of an obscure hebdomadal, like the *Journal*, they lose their importance and are restricted in their usefulness. With the view of rescuing such meritorious productions from the partial oblivion which awaited them, we have given them publicity and permanence. It is due to such valuable contributions to the science and practice of Medicine that they should have such a "habitation and a name" as is befitting their worth. In our pages they are a record of proceedings which can be criticized and admired by members of the medical profession throughout the universe. It would be unjust to their authors that they should be left to "blush unseen," except by the members of the British Medical Association.

THE important changes which we last week foreshadowed have been carried out at the College of Physicians of London in the very form and spirit of the principles which we have so long advocated. By unanimous resolutions the Fellows have passed and confirmed the new Bye-Laws and Regulations, and entered on the course of reform which promises so much to the profession. We quote elsewhere (p. 141), the chapter which relates to the new class of Licentiates, the regulations for their professional education, and the subjects of their study and licence. It will be seen that the College have proceeded with the care and deliberation which become a body of so great influence. But their act is quite unequivocal. The main privileges of the College are due to the Charter of HENRY VIII. That document has received the latest and most decisive parliamentary sanction by recent legislative Acts—(especially by the Act 23 and 24 VICT., c. 66). It expressly declares, in the most explicit manner, that surgery is a member or part of physic, and that the Company and Fellowship of Physicians are authorized to examine and license to practise in this as in all other members and parts of physic.

This ancient right was long exercised; and the Lumleian Lectures, which were founded as lectures on Surgery, and under which endowment HARVEY, as Professor of Surgery at the College of Physicians, read his lectures "On the Circulation," remain to testify to the former enjoyment of surgical privileges by the Fellows of the College. The old Charter, indeed, very philosophically and wisely contemplating medicine in which surgery is included, regarded the latter as an essential part of the medical education of every physician; and just as HARVEY himself applied surgically his great discovery by tying the nutrient artery of a tumour, which he had the satisfaction of seeing wither, so all other physicians of that time, as of the earliest period of medicine, regarded physic as a unity—of which medicine, midwifery, surgery (or operative medicine), were the parts. The same view is still taken by our eminent continental brethren, and the characteristic skill of a VELPEAU and a TROUSSEAU does not suffer by comparison with that of surgeons or physicians in this country, although both are members of *one faculty in medicine*.

The present movement of the College of Physicians by no means, however, goes to the full extent, although it will be rightly construed as being in that direction. The three grades of Fellow, Member, and Licentiate are preserved in all their distinctiveness; and it is expressly provided that "no Fellow or "Member of the College shall be engaged in trade, or dispense "medicines, or make any engagement with a chemist or any "other person for the supply of medicines, or practise medicine "or surgery in partnership, by deed or otherwise." Only the Licentiates will be permitted to practise surgery in partnership; but for this large class the boon will be very great. The College offers to them one licence to practise their whole art. This is a desideratum which has long been sought for. The intending general practitioner will not need to travel from one examining body to another, and to meet the various requirements of different corporations. He will be able to gain the most honourable status and the most complete powers from the College of Physicians.

It will be seen that the regulations for the new licence differ in one most important respect from the old regulations: more extended surgical education is required, and one day of surgical examination will be interpolated. Instead of six months' hospital surgical practice, the College requires twelve months; six months of clinical surgery and three of morbid anatomy are demanded. By the significant addition of a letter the student is informed that before being admitted he will be required to have passed the professional examinations: formerly this word stood in the singular.

Medical Annotations.

"Ne quid nimis."

THE COLLEGE OF SURGEONS AND THE MEDICAL COUNCIL.

WE have already explained the position which the College of Surgeons of England have taken up in relation to the Medical Council. The Medical Council have issued directions that medical education shall include a space of four years, and that these years shall be counted as commencing with the first entry at a medical school. The College of Surgeons have issued regulations in which they set at naught the recommendation of the Council, and provide that a shorter term of medical-school teaching shall be accepted, and that apprenticeship shall be reckoned as a part of the term of education. This is an act of direct insubordination—the more striking because the College of Surgeons are largely represented on the Medical Council, and their representatives have not been at other times by any means inactive in enforcing the decrees of the Council. To strengthen their position, they have now issued to hospital surgeons who are among their members a series of queries, with the view of ascertaining whether they agree with their opinions or with the opinions acted upon by the Medical Council. The document is remarkable for several reasons. In the first place, it is an appeal from the Council to those outside the Council to pass judgment upon their decisions. This appeal has not been made on the many previous occasions when important but dubious decisions have been taken. It is worthy of notice that it has been made now: we trust it may be a useful precedent. It has at present, however, too much the aspect of an attempt to stir up insurrection against the Council. The questions which the College proposes to its Fellows are precisely those which the Medical Council was created to decide. Nay more, it has authoritatively decided them. This, then, wears upon the face of it an attempt to create within the College a body not constituted or recognised by law,—a superior court, to revise the proceedings of the Medical Council. It will be held to aggravate the disloyal conduct of the Council of the College of Surgeons; and Dr. Burrows has intimated a threat that unless the College of Surgeons withdraw their opposition, and act in a manner more accordant with the provisions of the Act which gives power to the Medical Council, it will find itself placed in a lamentable position before the Privy Council. We have not space this week to discuss this question at the length which it requires, but append the queries which form a part of the remarkable document:—

"1. Might the initiation into the surgical profession consist in some cases in a pupilage for the first year, with such instruction as the opportunities in any case permit, under the direction and supervision of 'a member of one of the Royal Colleges of Surgeons in the United Kingdom, or of the Faculty of Physicians and Surgeons of Glasgow;' but in addition with a certificate, prepared for the purpose, of the pupil's employments and studies during the same period, and of 'having studied practical pharmacy during three months:' thereby leaving it at the option of parents or guardians to devote the first year to the 'breaking in' of a youth to the rough-and-ready work of his future duties, and to the habits of endurance and privation which in most cases, and especially in country practice, cannot fail to be his lot?

"2. Or should the commencement of such pupilage be invariably confined to an hospital or similar public institution recognised for that purpose, whether with or without a medical school attached to it, and where the teacher, being a member of one of the Colleges, holds office as a surgeon in such recognised institution?

"3. Or should attendance on lectures at a medical school be the only mode in which professional study should be commenced?

"4. Or might practical instruction and training, as designated in queries 1 and 2, be more advantageously assigned to one or more summer sessions, the commencement of professional study being required in all cases at a recognised medical school—that is, by attendance on lectures and in the dissecting room?

"5. In consonance with the above inquiries, the Council of this College earnestly request information on the subject of the following and final query:—What are the opportunities which exist, or which might be made available, for practical instruction in the hospital with which you may be connected, or in any similar public institution at or near the place of your residence? and especially, whether pupils in attendance at such hospital or public institution might be required in all cases to act, and to be trained, as dressers under a competent instructor?"

BRITISH MEDICAL EXCLUSION.

A SINGULARLY old-fashioned and injudicious attempt was made in the course of the meeting of the British Medical Association to limit the circulation of the papers read on the present

occasion within the narrow circle of its associates. Immediately on the delivery of Dr. Walshe's address, the President, addressing that orator publicly in a marked manner, stated that he had been informed that Dr. Walshe intended publishing his oration in an influential medical journal; that papers read at the meeting were the property of the Association, and could only be published in the *Journal* of the Association. Under these circumstances, he thought that Dr. Walshe might, as a man of honour, fairly violate any arrangement of that kind into which he had entered!! We say nothing as to the peculiar code of honour under which such a proceeding could be conceived or publicly recommended, although some unpleasant remarks might fairly be made upon that subject. But, as a matter of simple reason and expediency, was ever so antiquated and foolish a notion suggested? or, as a matter of policy, was ever a more suicidal course devised? Is the interest of the Association to be served better by consigning the records of its proceedings to the pages of a journal not known out of the immediate circle of the members, or by dispersing them to the entire medical profession? This is what we do for them by reporting to-day their proceedings and publishing their best papers. We spread the knowledge of the doings and sayings of the meeting through all the profession in this kingdom and in all the countries of the civilized world. The advantage of an audience which should consist of so many thousand persons out of the Association, as well as of its members, was clearly enough felt by the orators and authors of papers. But their intelligence was not allowed to be of a higher standard than that dictated by authority, and an attempt was made to coerce the authors into the reservation of their papers for that limited audience. It is fortunate for the interests of the Association that that attempt failed so completely as it has, and that we present a full report of its proceedings in our pages. It only remains for the Council of this democratic Association to propose that the meetings shall take place with closed doors, and that reporters shall be excluded, to crown this very foolish and very futile effort. Such a culmination would almost be worthy of what has gone before. It would then enjoy a sole and unenviable notoriety which no other public association has attained, and the talk about diffusion of medical knowledge and promotion of the general interests of Medicine by open discussion of reforms would be capped by a perfect anticlimax of exclusiveness. But the members of the Association will have no unfruitful theme for cogitation if they consider the end for which this last effort at self-extinction was made. It was in favour of the *Journal*, which it is stated costs the Association seventeen-and-sixpence out of every pound subscribed for all purposes, that this deadly blow was aimed at the popularization of the transactions of the Association, and the publication throughout all the ranks of the profession of the proceedings of its London meeting. It was to swell the columns of that lean and melancholy periodical that the Council sought to lay forcible hands upon the papers read at their meeting. But the privileges of the press are as little understood as the interests of the Association by those who attempted to practise this ill-devised and childish monopoly. Public opinion has long ago confirmed the decisions of the law in this respect; and, supposing that any of those in authority at the Association should attempt to carry out the puerile scheme of preventing the report of its meetings when the public press finds them worth while reporting, that attempt would be a failure, and worse than a failure—it would be a fatal error. If they understand their own interest, they will let their reports be published in their own *Journal* by all means, and be very much obliged to all other journals that may take the trouble of reporting them also. The final absurdity of this weak attempt to infuse vitality into their sickly periodical is the proposition that we should be content, when we desired to report the proceedings, to accept slips from that *Journal*, and thus, like it, to dribble out the report in small instalments for the next six months. We cannot submit to be put into those infantile leading-strings.

THE VACANT CORONERSHIP.

GREAT results, like nails, are only produced by continuous hammering; and it is equally important in both cases to hit the right nail on the head, and to do so whilst it is hot. This may appear a simple truism; but many of the great failures of life result from its neglect. Oftentimes a man makes one brilliant success; floats down the stream, borne onward by the favouring breeze of public opinion; never troubles himself to guard that his sails keep full, and so drifts into some eddy of insignificance. So also a great cause may be acknowledged by all men as just, and by the very impetus of this right judgment, secure a victory. Then the efforts relax, the enthusiasm dies out, and defeat succeeds defeat.

We trust this sequence may not have to be recorded to our shame; that the efforts made to vindicate the rights of the medical profession to fill from its ranks the coronerships throughout the country may not relax. A noble example has recently been set in the election of Dr. Lankester. The profession in London fought bravely to support the great principle that medical men should fill the office of Coroner. They fought in support of the principle, not in its defence; for where there was neither reason nor argument, there could be no attacks to call for defence. Hence it was that the public, when once aroused to the merits of the case, acknowledged the justice of the claim. It is only needful, as other vacancies in the office of coroner occur, to thoroughly enlighten the minds of those in whom the election is vested, in order to ensure an equally satisfactory result.

We trust that the medical men of Devonshire will immediately take counsel together as the men of London did, to insure that the claims of the profession shall be properly represented at the forthcoming election for the coronership in that county which is now vacant. In the adjoining county of Somerset two of the three coroners are medical men; and the old local proverb about "Lidford law,"* which casts a slur on the administration of justice in the county of Devon, would appear to have originated from some such exclusive method of dealing with the dead as occurs when any but medical men have to superintend inquiries into the cause of death.

* "First hang and draw,
Then hear the case by Lidford law."

THE LATE DR. M'WILLIAM, C.B., F.R.S.

THIS eminent member of our profession, we regret to find, has left his family in straitened circumstances, and a committee of medical officers of the navy has been formed for the purpose of raising a fund amongst the profession generally for the benefit of his widow and orphan children. A sub-committee has been constituted to co-operate in this excellent design. It consists of some of the most distinguished members of our profession. The services which Dr. M'William rendered, not only to his medical brethren of the naval service, but to the cause of sanitary science in general, are too well known to require enumeration. No man laboured with greater earnestness or singleness of purpose in the cause of his profession and of the public than Dr. M'William. Subscriptions in aid of the M'William Fund may be paid, by cheque or otherwise, at the London and Westminster Bank, St. James's-square. It will be gratifying to us if the office of THE LANCET should be made a medium of assisting the cause of those who have strong claims, not only upon the members of our profession, but on the public in general.

THE PROFESSIONS OF CORONERS.—There are 352 county and borough coroners in England and Wales, of whom 263 are of the legal, and 62 of the medical profession.

Thirtieth Annual Meeting

OF THE

BRITISH MEDICAL ASSOCIATION,

HELD AT THE

ROYAL COLLEGE OF PHYSICIANS OF LONDON,

On Tuesday, August 5th, Wednesday, August 6th, and Thursday, August 7th, 1862.

THE first meeting of the Association commenced at three o'clock on Tuesday, Dr. Alfred Lochée, the retiring President, in the chair.

In opening the proceedings,

Dr. LOCHÉE said: I have happily, as I think, gentlemen, no more prominent part to play on the present occasion than to appear before you for a moment in order that I may resign in a becoming manner the office which by your favour I have held in the Association during the past year. In doing this I am, however, called upon, as a mere formal act of duty, to introduce to you my successor. I say as a mere formal act of duty, because such a man can need no introduction, and least of all from me. Known as he is to the profession and the public by an honourable career amongst the most renowned of our London brethren—distinguished as he has long been by high office and by useful counsels in this venerable College, within the walls of which we are now so auspiciously assembled—it would be impertinent in every sense of the word if I were to eulogize him before you. Let it, then, be enough for me to say, as the concluding act of my official career, how confident I am that Dr. Burrows will receive at your hands, though needing them far less, the same consideration and support which, I gratefully acknowledge, have been so largely accorded to myself. (Applause.)

THE PRESIDENT'S ADDRESS.

Dr. BURROWS addressed the members as follows:—Gentlemen, in taking possession of this chair in succession to Dr. Lochée, who so ably presided over our anniversary meeting at Canterbury, I assure you I feel deeply sensible of the responsibili ies which I incur. It is impossible not to feel the difficulty of the task that I am about to perform—that of addressing the members of the Association on this day, which I believe will ever be memorable in our annals; the difficulty, I say, of addressing the Association on this day, and not less so the attempt to satisfy your reasonable expectations, and to raise the theme of my discourse to a tone commensurate with this occasion. I hope it will be in unison with the feelings of all who are here assembled if I congratulate you upon the auspicious event that, by the liberality and courtesy of the President and Fellows of the College of Physicians, we assemble this day within the walls of this time-honoured institution. (Applause.) May the *genius loci* diffuse an elevating influence over all our proceedings; and may the very fact of our assembling in the library of this College, which has always prided itself upon the learning and moral tone of its Fellows, assure us that the British Medical Association is respected and appreci ted by men who, from their education and position, and from the traditions of their order, are naturally slow and cautious in admitting the claims of a new institution founded upon a principle different from that of their own. I should be wanting in respect and gratitude towards you who have placed me in such an honourable and conspicuous position as President of the British Medical Association, upon this the first of its meetings in the metropolis, if I did not express my anxious desire and firm resolve to exert myself to the utmost to make this meeting successful (hear, hear), satisfactory to the members, and conducive to the great objects that we all have at heart—the advancement of medical science, and the elevation of the social position of our profession. Without the co-operation and advice of the Committee of the Metropolitan Branch, and the invaluable assistance of the honorary secretaries, and more especially of my indefatigable friend, Dr. Stewart, it would have been entirely beyond my powers to have attempted the performance of the anxious duties of President. (Hear.) In the name of the metropolitan members, I cordially welcome our provincial brethren. (Hear, hear.) I assure them that we experience a peculiar gratification in inviting them hither, and reciprocating those kindly feelings and genial hospitalities which have been so frequently and so lavishly bestowed upon all who have had the good fortune to attend the annual meetings in the different provincial towns of Great Britain. At some of our provincial meetings a modest apology has been put forward that the locality or other adverse circumstances have prevented an adequate supply of objects of interest to occupy the leisure hours of the members, but I believe it has rarely happened that those who have attended the anniversary meetings have not been fully satisfied with the entertainment, intellectual and social, which has been provided for them. (Hear.) Here, in the metropolis, we can have no excuse of this kind to offer should we fail to provide for the reasonable expectation and gratification of our members. The danger to be apprehended is lest the numerous and great attractions of this metropolis should withdraw the members, particularly our country friends, from taking the active part desired in our proceedings, which it is essential should be carried on in the presence, and with the concurrence and co-operation, of a large number of members. Never was the truth of the axiom, *vis unitate fortior*, more certain than when applied to a society like our own. One institution may derive its influence from its antiquity, and from the prestige of great names, and another may have ample powers confided to it by the Legislature, but a strictly voluntary society such as the British Medical Association derives its force from the number of members upon its roll and in attendance at the annual meetings, and from the unanimity with which the proceedings are conducted. The unrivalled collection of works of art, of mechanical skill, and of nature's products, gathered from almost every inhabited region of the globe, and displayed for our instruction and admiration in the International Exhibition, must offer irresistible attractions to our provincial members who have not previously enjoyed an opportunity of inspecting that wonderful collection. May we not reasonably hope that these successive displays of the industry, the inventive faculties, and the other peculiar qualities of the respective nations of the world, and of the products of the earth in various climes, may not only have the primary effect of stimulating art and improving manufactures, but still further, by bringing together numbers of the most intelligent members of each community from different parts of the globe, the conviction may be brought home to the minds of all, that absolute perfection resides nowhere, that each nation has its distinctive talents, each country its special and superior products, and that the happiness of mankind will be promoted by this honourable rivalry and instructive intercourse, as well as by a peaceful interchange of those commodities which are superior or superabundant in one country, but which are inferior or wanting in another country? Gentlemen, if such benefits as these may arise from the intercourse of foreigners with each other, may we not fairly assume that the scattered members of a common profession, although usually kept apart by great distances of residence, and by the imperious calls of duty, may derive great moral improvement by being brought from time to time from their homes to a common centre of attraction, and that centre being the anniversary meeting of this the British Medical Association. Before I quit this part let me announce particularly to our country friends that the Council or Committee of Management fully appreciate and recognise the claims of the International Exhibition upon their time and upon their attention, and have therefore made such arrangements of the business hours of each day that the afternoon hours should be free to them for visiting and enjoying the International Exhibition without forsaking the ordinary meetings of the Association. Before I proceed further, and invite you to enter upon the business of this meeting, let us consider what are the chief objects of our Association. This Society, over which I have the honour this day of presiding, has now existed exactly thirty years, and was founded as you well know, by our much-respected friend Sir Charles Hastings. (Hear and applause.) By its original constitution, its operation and influence were confined to the provinces, and the two main objects to which the efforts of the Association were directed were the promotion and diffusion of medical science; and, secondly, the maintenance of the honour

and interests of the medical profession. After a course of twenty years of great success and popularity, the Provincial Medical Association determined upon extending the area of its labours, and metropolitan practitioners were invited to unite with their country brethren. When this union was happily effected, the Association naturally assumed a title more expressive of its extended field of action, and it became the British Medical Association. This Society, both before and since the assumption of its present designation, has been a strictly catholic medical institution, embracing all grades in the profession, liberal in its constitution, and free from all class or corporate prejudices, so that every legally-qualified medical practitioner can become a member of this Association if he so desire. Such, then, are the objects and principles of our body briefly enunciated. Let us now inquire how far this Association is acting in accordance with its avowed principles, and whether it really tends to the promotion of medical science and the diffusion of medical information amongst the members. For a long series of years this Association published volumes of "Transactions," in which are to be found numerous original papers of peculiar interest, contributed principally by the members resident in the country, and which contain the observations and the local experience of provincial practitioners of great eminence. The *Journal* of the Association—the recognised organ for the diffusion of intelligence, for reporting the proceedings of our various branches, and for the reception of lectures, essays, and other contributions of more ephemeral interest, and which was formerly a provincial journal, has long since become a metropolitan publication. The annual meetings have stimulated researches of great value, the results of which have been made known to and discussed by our members, whilst most elaborate and carefully-prepared reports upon special subjects of Medicine and Surgery have from time to time been presented to the Association, and subsequently published in various forms. We look forward with confidence to the number of important papers which will be submitted to your consideration in the course of the present meeting, and especially do we anticipate that you will derive both satisfaction and instruction from listening to the reports on Physiology, Medicine, and Surgery which we are promised by three distinguished professors — Dr. Sharpey, Dr. Walshe, and Mr. Paget. It has long been my opinion that, on account of the vast extent of the medical and collateral sciences, and the large number of fellow-workmen in different countries simultaneously engaged in kindred pursuits, and the results of whose labour are to be searched for with much loss of time in various foreign journals, an annual *résumé* of the discoveries and of the present state of any department of our profession must prove highly satisfactory and instructive to men largely engaged in the duties of private practice, provided however that such reports are prepared by men of ability, impartiality, and truthfulness. We do not doubt that you will approve the choice of the eminent men we have selected, who have kindly consented to undertake the arduous task of preparing such reports for the present meeting. The Association then, I affirm, is not forgetful of one of its primary objects—the promotion of medical science and the diffusion of information among the members. Those amongst us who reside in the metropolis or in some of the great centres of British industry may not feel the want of these anniversary meetings for the purposes to which I have just alluded; but to those of our members who reside in the rural districts or in small provincial towns these anniversary meetings, as well as those of the district branches, I believe are fraught with advantages which can hardly be too highly appreciated. The isolated rural practitioner, having rarely an opportunity of conferring with his professional brethren, has but slight encouragement to notice cases of interest passing through his hands; but when he has the prospect of a district or branch meeting before him, he is induced to observe more closely, to record the results of his observations, to reflect and reason upon those observations, and to commit the thoughts to writing, and the result often is an interesting paper communicated to the next branch meeting. Each member of that branch is benefited, I say, both mentally and socially by such efforts; each occasion of contact and honourable collision with his fellow-labourers tends to improve the outer and inner man. As the pebbles on the sea-shore by their contact and collision with each other at each succeeding tide gradually lose their primitive roughness and assume a graceful form and polished exterior, and when moistened by the spray of the ocean appear in a most attractive guise,—so is man by coming in contact with his fellow-men by social and intellectual intercourse raised to a higher order of being (Applause.) Let me, then, now pass on to the consideration of a second, and to my mind not less important, object of this Association. The British Medical Association I believe has been, and I trust ever may continue to be, a most powerful instrument to promote and protect the social interests and to elevate the moral tone of the profession. It was founded, as I have already said, in no narrow or sectarian spirit; and those who founded it and sustained it in its early days, and who have guided its councils through the past thirty years, must look back with honest pride upon the results obtained through their anxious and steadfast labours. Never was an institution free from class prejudices, and yet nobly exercising a moral control over its members, more required in our profession than at the present time, when, I may say, "Men run to and fro and knowledge is increased." Since the formation of this Association many important questions relating to the cause of humanity, the advancement of science, and the welfare of the profession, have been agitated at our annual meetings, and the influence of the Association has upon many occasions been felt in the Houses of Parliament when laws relating to the organization and government of the profession and its relations to the general community have engaged the attention of the Legislature. I have ventured just now, gentlemen, to assert that an institution founded upon the principles of the British Medical Association is urgently required in the present day. Let me endeavour to illustrate and justify this opinion. It will be admitted as a truth by all reflecting persons that institutions which are advantageous and suitable to society in one stage of civilization are not so in another. When society progresses and civilization has advanced, primitive institutions require to be remodeled, or they fail in exercising their former wonted beneficial influence. In the infancy of trade and commerce certain laws and regulations may be essential to their growth, protection, and prosperity; whereas, when trade or commerce has developed itself, has become firmly established and has arrived at maturity, the very same laws and regulations may act as shackles and impediments to the industry and enterprise of those who are engaged in such pursuits. Thus in the infancy of England's commerce we find kings and statesmen encouraging adventurers and merchants to make voyages to distant regions and open new fields for our trade, and offering premiums to such enterprises by granting monopolies. These monopolies were originally granted not only as marks of royal favour for supposed services, but were considered as essential to the development and well-being of commerce; whereas now, the very term "monopoly" has become odious, and such a restriction is deemed hurtful to the true interests of commerce. In like manner particular trades and callings were placed under the protection and regulation of certain bodies termed guilds or companies, and no man could follow his trade or calling unless he served his apprenticeship or became subject to his guild or company. We know what extensive powers and exclusive privileges were accorded to these corporations, and what political influence they formerly possessed. At length, however, a period arrived in our history when the stripling trade of the country had made such gigantic strides that it could no longer be compressed and controlled within the limits and narrow rules of these ancient corporations. The bankers and money-changers of former days might have been, without injurious consequences, subordinate to the rules of the Goldsmiths' Company; but who could expect that the enormous trade in bullion which has sprung up and risen to such vast proportions since the gold discoveries of Australia, California, and elsewhere, and all the delicate fluctuations of the money market, could now be subjected to the authority of the Goldsmiths' Company? Again: the Grocers' Company, at the time of its incorporation, might well have supervised the trade in spices, tea, coffee, and sugar; but who could suppose that the multifarious transactions of the colonial market in the present day could be carried on under its former restrictions? Similar remarks would apply to many other trades and occupations, and to the corporations which have ruled over them, and to none more forcibly than to the late East India Company. The formation, the rise and progress, the prosperity and influence, the decline of power and end of that great company formed an episode in our country's history of surpassing interest, and convey to us an instructive and encouraging lesson as to what may be effected by the voluntary association of a number of earnest, industrious men. If we look to the beginning of that company's career, when it only possessed a factory on the banks of the Hoogly river under the protection of a native prince, and then contemplate this body of merchant princes in all their affluence, might, and power, exercising a paramount lordship over the ancient sovereigns of Hindustan, possessing a monopoly of the trade of India and China, and directing the destinies of 200,000,000 of human beings, we are lost in surprise and admiration at the doings of this body of men. But this company

after a certain period—having done its work, having raised a fabric beyond its power to sustain—crumbled under its own superstructure, and has passed away and become one of the ruins which are the beacons of the historian. All the other corporations to which I have alluded have in their day conferred important services on some particular trade or upon commerce generally; but to each and all of them a period arrived when they required to be remodeled or adapted to a new order of things, or to be altogether superseded by institutions appointed to fulfil more extended functions. In no country of the civilized world have we seen a more firm adherence to that which is sound in principle, and at the same time a more gradual and happy moulding of forms and institutions to the advancing knowledge and wants of the community than in our own. In the earliest epoch of our own profession, when it was developing itself into its present forms, we find certain colleges or corporations were founded, and to them were assigned the government, improvement, and protection of the respective orders in the profession. We could hardly recognise ourselves as a distinct profession, dissociated from the priesthood in one direction, and from the barbers and grocers in another direction, prior to the granting of the Charter to the Royal College of Physicians by King Henry VIII. That Charter was most liberal in its principle and comprehensive in its scope. To a certain number of learned men was granted, as the Charter runs, "all that was necessary for the good government of all men pursuing physic in all its branches." But shortly subsequent to, and for some generations after, the grant of this Charter came the day of religious intolerance and political exclusiveness; and a Charter which was originally framed for the good of all men of the faculty of physic, was perverted to political purposes, and to promote the selfish ends of a small section of the commonalty of physic. Let us not judge too harshly the conduct of by-gone generations, nor of those who have preceded us upon the stage of professional life. We may not approve the course they may have adopted at some critical period; but we all know that when events have passed, and produced their natural consequences, it is easy for those who come after to sit in judgment, and pronounce which would have been the wiser course to have adopted in a particular juncture. Whatever narrow or exclusive policy the College of Physicians may have pursued in earlier times, it must be confessed by all who take the trouble of studying its annals that the College has always upheld the learning and moral tone of its Fellows, and thereby sustained and elevated the social position of the whole profession in England. (Applause.) Although the College of Physicians has recently modified its constitution, with the desire to satisfy a want, and to render the institution more useful to the mass of the practitioners in medicine, still it must be borne in mind that the Medical Act of 1815 has placed this College in a very different position from that which it occupied for three centuries previously. During that long period the College enjoyed almost a monopoly in the creation of physicians in England, and it was armed with stringent legal powers to enforce obedience to its regulations. Now this College no longer possesses that monopoly; but it performs its functions conjointly and on equal terms with the Colleges of Physicians of Ireland and of Scotland and the ten Universities of the United Kingdom, while the exercise of its legal authority has fallen into disuse. Hence, then, this College of Physicians has no longer power to regulate and control the practising physicians throughout England and Wales. The second public medical corporation to which I must advert is the Royal College of Surgeons, and this is comparatively a modern institution, one of rapid growth and great power. It is only during the past century that we can recognise it as a separate body, and only through a more recent period that it has exercised such an extended influence over the character and position of a large portion of our profession. The fame of John Hunter, based on his original and profound researches throughout animated nature—the custody of the great national treasure, the museum of that eminent man—the concentration of surgical talent which arose after Hunter's death, and which was composed of his pupils and immediate successors, Cline, Astley Cooper, Abernethy, Brodie, Travers, Lawrence, and others—the augmentation and illustration of the Hunterian Museum by the labours, talents, and eloquence of Professor Owen—all these circumstances conspired to place the College of Surgeons in a proud and commanding position, and have tended to raise British surgery to a high point of estimation both at home and abroad. But, granting to the College of Surgeons all these honourable claims to distinction and scientific reputation, it may be questioned whether the constitution and policy of the governing body of that College have been such as to conciliate the feelings of, and maintain a wholesome moral influence on, the members of the corporation. (Hear, hear.) The recent deplorable disregard which the College of Surgeons has manifested for the regulations of the General Medical Council respecting the best method of conducting the education of students entering the profession, has again, in my opinion, placed that College in a false position. Should the Council of the College of Surgeons unfortunately persist in the course which it has lately adopted, and maintain its antagonism to the General Medical Council on the all-important question of medical education, the result must be either that the regulations of the General Medical Council will be set at naught with impunity by the other educational bodies as well as by the Royal College of Surgeons, or this latter body will be ultimately brought into a most lamentable collision with the General Medical Council before her Majesty's Privy Council. It is well known that the legal authority of the Council of the College of Surgeons over its members is trifling, and I fear the moral influence of that body at the present time is impaired and inadequate to all the useful purposes to which it might be directed. The third medical corporation or company which has had a powerful influence in bringing our profession to its present condition is the Apothecaries' Society. This ancient body had a new and vivifying principle infused into it by the trusts confided to it by the celebrated Act of the year 1815, and the faithful manner in which that Society has for nearly half a century discharged the duties imposed upon it by that Act of Parliament, has not only redounded greatly to the credit of the Society, but I will venture to say, has almost revolutionized the whole profession throughout England. (Applause.) The medical profession as it was in the year 1815 is not to be recognised as it exists in the year 1862. Under the gradual influence of the regulations of the Society of Apothecaries, the medical education of all grades of the profession in England has steadily advanced, and after half a century of progress, that Society has produced a new order of things, by the creation of a numerous body of gentlemen who are no longer the apothecaries of 1815, but who, from their superior education and attainments, are naturally anxious to attain a different professional status from that which was formerly held by the members of the Apothecaries' Company. It is no reflection upon that Society when I publicly express this my belief, that their efforts to raise this branch of the profession have been eminently successful; and I should exceedingly regret if my remarks were interpreted in any other sense than that of respect and commendation. It is, I repeat, but the natural consequence of the successful efforts of that Society in raising the education of its licentiates that a higher tone of feeling should have been created among them, and that many of those gentlemen should be animated with the desire of obtaining an acknowledged professional status different from that which was formerly held by the apothecary in this country. So long as lines of demarcation between the different grades of the profession in England were sharply defined, and every man legally practising his profession was more or less closely affiliated to one of these three corporations, the moral government of the profession, although imperfect, was practicable. But when by the improvement of education throughout the mass of medical practitioners the distinction between the different orders became less and less, and the lines of demarcation became more and more indistinct,—and still further, when by recent legislation a perfect reciprocity of practice was universally established throughout the United Kingdom, numbers of men would necessarily be found practising their profession far beyond the control of their former *alma mater*, still not acknowledging allegiance to any particular medical corporation. Then, I say, the legal control and moral influence of these Colleges and Societies over the body of practitioners virtually ceased to exist. I have thus endeavoured, gentlemen, to take an impartial survey of the past, the present, and the probable future relations of the three medical corporations towards the mass of the profession; and I cannot refrain from the conclusion that both at the present time and for the future these corporations, like those which in olden times were instituted for certain commercial purposes, cannot and will not fulfil an important part of their original functions, and that either some new institution founded upon more comprehensive principles and incorporated by the Legislature, or some voluntary association, formed and based upon no exclusive principles, but embracing members of every grade in the profession, is wanted to supply this inability in the older institutions to exercise a wholesome moral influence over the whole medical community. (Hear, hear.) The British Medical Association, both in its principles and its formation, embodies this very idea, and supplies what I

humbly think is a desideratum in the profession. The different medical corporations may still rightly superintend the education and test the qualifications of those entering the three orders of the profession, but it must be some body having more general and acknowledged authority than they possess which can exercise a real moral influence over the profession as a whole. Judging by the experience of the last few years, it is not probable that the Legislature would sanction the establishment of any new medical institution, or invest it with any controlling powers. But if the British Medical Association can, by its numbers and its proceedings, carry public opinion along with it, then it has an intrinsic power equal to any that could be granted to it by the Legislature; and this moral power may be applied to the production of most beneficial results. Another important feature of our Society, and which must not be lost sight of, is, that if any great injustice is attempted to be inflicted on any section of the profession, or if any urgent want is felt for legislation upon any particular subject, then the anniversary meeting offers an arena where these topics can be brought forward and considered, and where, by private conferences among those most interested, or by free open discussions, a remedy for such evils can be suggested and supported by the united voice of a large number of fellow-workmen. Thus, then, I believe this Association, if it be true to its principles and keep certain great objects constantly in mind, has a noble mission assigned to it, and may, from the strength it derives from public opinion, exercise a most beneficial control and influence, and be the means of sustaining a high moral tone among the members of the medical profession throughout the kingdom. Therefore, gentlemen, in conclusion, I say, *Floreat semper!*

Dr. WILLIAMS (the Secretary) then read the annual Report of the Council, which stated that 130 new members had been enrolled during the past year; and since the last annual meeting there had been 75 resignations, 30 deaths, and 25 erasures, leaving a total number of members on the books of 2120. The receipts for the year amounted to £2820 15*s.* 9½*d.*, and the expenditure to £2713 10*s.* 7*d.*, leaving a balance of £107 5*s.* 2½*d.* The assets, including £500 unpaid subscriptions, were estimated at £907 5*s.* 2½*d.*, and the liabilities at £666 17*s.* 2½*d.*, leaving a balance in favour of the Association of £240 8*s.*

The PRESIDENT then called for a show of hands in favour of the adoption of the Report, which was unanimously agreed to.

Mr. WEBBER complained that the adoption of the Report should be put to the meeting from the chair without being proposed or seconded by any of the members, observing that such a course had the effect of shutting out all discussion.

Dr. WEBSTER said the custom had always been to have the Report proposed and seconded by some members of the Association.

The CHAIRMAN said he would gladly follow the custom of the Association, and called upon some member to propose the adoption of the Report.

Sir CHARLES HASTINGS said he had great pleasure in proposing the adoption and reception of the Report, and congratulated the Society on its improving prospects. It was thirty years since a small but earnest band combined together to form the Society. Since that time it had gone on prospering, and he could not conceive now, in its high state of prosperity, any circumstances more calculated to advance its onward progress than the present auspicious meeting in the metropolis, under the presidency of Dr. BURROWS (Hear, hear). There was one point mentioned in the Report to which he desired briefly to allude—namely, the representation of the profession in Parliament. If the law passed last year with regard to the Universities turned out to work successfully, there was no reason why on some future occasion the claims of the medical profession to representation in Parliament should not be favourably received by the Minister of the day. A variety of questions would be brought before the members; they were not perhaps of the same intense interest as those which engaged them during the agitation of the Reform question in Parliament, when the labours of the Society were so eminently successful in obtaining the Medical Act. That Act no doubt might be improved; but the effect had been that medical men of all classes under the registration had become one body in every part of the British empire. (Hear, hear.)

Dr. WEBSTER seconded the resolution, and congratulated the President on his accession to office, especially as the son of an old friend who had done so much in former times to advance the interests of the profession. Previous to 1815 the general practitioner was not cared for by the Colleges of Physicians and Surgeons—nay, he was almost repudiated; and it was mainly owing to the efforts of the late Dr. Burrows that the Act of 1815 was passed which conferred so many benefits on the profession. He congratulated the Society on its meeting within the walls of the College of Physicians—a body which might have been expected to be the last to take up the various questions of reform connected with the profession, but which had shown itself amongst the foremost and the most liberal of those who had interested themselves in the subject. (Hear.) He regarded the British Medical Association as the Parliament of the profession and the exponent of public opinion. He was glad that the Society had wiped out its debt, and rejoiced that it had attained so prosperous a condition.

Mr. W. SANKEY said he could not endorse the view of the last speaker with regard to the treatment of the general practitioner prior to 1815. He was himself a practitioner before that period, and he had also a father in the profession. It was in justice to the College of Physicians that he desired to express his dissent from the views of Dr. Webster.

Mr. WEBBER alluded to a paragraph in the report urging the members to send contributions to the *Journal*, and complained that when papers were so forwarded and printed, the type was afterwards used for printing them in a separate form. He thought the *Journal* type ought not to be employed for private purposes. He also inquired if the *Journal* had a sub-editor and reporter; and complained that a garbled report of his observations at the Canterbury meeting had found its way into the pages of the Society's organ. The speaker was about to bring forward a motion of which he had given notice with reference to his dispute with Mr. Wells, but, at the suggestion of the President, the consideration of the subject was deferred to a later period of the meeting.

Mr. STEELE regretted that, in referring to the subject of medical legislation, the report made no allusion to the late Medical Act, which, however valuable, was in several respects defective, and required amendment. He should be glad to know what steps were being taken to supply its defects. He regretted to find that so many members were in arrear with their subscriptions, and suggested that the Council should take prompt measures for remedying the evil.

A desultory conversation took place as to the best mode of dealing with those members whose subscriptions were in arrear. It was suggested that their names should be published; but it was explained that this would amount to a libel. The payment of the subscription, it was stated, could not be legally enforced, and was strictly a matter of honour.

The PRESIDENT, in reference to the remarks of Mr. Steele, stated that at the last meeting of the General Medical Council, held two months ago, the subject of an amended Medical Act was considered at great length, and a Committee was appointed to consider the suggestions received from various quarters, and to employ the solicitor of the Council to draw up an amended Act, which would probably be submitted to the next meeting of the Council.

The Report having been adopted, it was resolved, on the motion of Dr. Richardson, seconded by Dr. Williams, "That the best thanks of the meeting be given to Dr. Melsom and Mr. Hadley, of Birmingham, for auditing the accounts of the Association, and that they be requested again to undertake the duties of that office."

A vote of thanks was then, on the motion of Dr. Radclyffe Hall, seconded by Dr. Henry, unanimously accorded to Dr. Lochée, the retiring President.

Mr. Propert moved a vote of thanks to the Council of the Association, which was seconded by Mr. Steele, and adopted.

On the motion of Dr. Richardson, seconded by Mr. Smith, Dr. Williams was re-elected to the office of Secretary.

The PRESIDENT then read the following resolution, which, he said, had been passed by the Council: "That Mr. Webber having given notice that he intended to bring a charge of professional misconduct against Mr. Wells, at the same time that he expresses, in his letter to the general Secretary, a willingness to submit to any other mode of entertaining this question which the Council may think preferable, this Council is of opinion that it would be best to refer the question to a select committee of three persons, to be appointed at once, and who shall be called upon to adjudicate on the matter without delay." He should be glad to know whether Mr. Webber would assent to that recommendation, he having the option of appointing one referee, Mr. Wells another, and the Association the third.

Mr. WEBBER said he should be happy to fall in with any suggestion emanating from the Council. He should decline, however, appointing any member of the committee, being willing to leave his case in the hands of any unprejudiced person. After a professional life of forty-five years he was now visited with ruin. The subject which he was to have brought before

the meeting was the late action for libel. The object of the Association was the advancement of science, and the maintenance of the honour and respectability of the profession, and it ought, therefore, to bring to account not only individuals, but even corporate bodies. If the College of Surgeons had done its duty he need not have troubled the Society; as it was, he had been brought to ruin by their negligence, but he believed that the course he had been compelled to adopt would secure him the sympathies of the profession. When the action was brought into court, he had the misfortune not to have his case stated; the consequence was, that the judge misdirected the jury, and an adverse verdict was returned. The judge was asked to stay execution, but he refused, and the bailiffs were accordingly sent to his (Mr. Webber's) house to sell off everything in three days.

The PRESIDENT here interposed, and asked if Mr. Webber would consent to refer the matter to a committee, as recommended by the Council.

Mr. WEBBER said he would consent if the committee would publish the evidence brought before it.

Dr. STEWART thought that no pledge to that effect should be given.

Mr. WEBBER said he would be willing to entrust the case to the committee appointed at Canterbury—Dr. Westall, Mr. Bottomley, and Mr. C. Barrows, of Brighton.

Mr. S. WELLS said the matter had been settled in a court of law before the Chief Justice and a special jury, and that was the only place where he would meet Mr. Webber, who, if examined, would have to give his testimony on oath, and be punished for perjury if he swore falsely. If Mr. Webber chose to submit his case to a committee, he would do so without meeting with any reply whatever.

Mr. WEBBER said if he could be allowed to appear in court *in formâ pauperis*, he would willingly do so, and then it would appear on whose side perjury existed. He should certainly appear before the committee, the Council having so decided, and if Mr. Wells dared not meet him, then the public would draw their own inferences.

Dr. WEBSTER suggested the appointment by the Association of a "Court of Honour" for the consideration of disputes arising amongst the members.

The subject then dropped, and the meeting adjourned.

The *conversazione* at the College of Surgeons in the evening was very numerously attended. The novelty of an invitation from the President and Council of the College met with the response which might have been anticipated from such an occurrence. For the first time since the foundation of the institution the fellows and members were invited by the authorities to enjoy a social evening in their own home. The President and Council will, we hope, be impressed with a sense of the importance of repeating the experiment. Nothing could have been more satisfactory than the proceedings of Tuesday night. The magnificent rooms of the College were brilliantly lighted, and filled with objects of unusual scientific, literary, and pictorial interest. The refreshments were on a liberal scale. The visitors separated at a late hour, somewhat astonished that the authorities of the College had not before adopted so simple and efficient a mode of bringing their members and fellows together. It is never too late to adopt a judicious mode of action.

WEDNESDAY, AUGUST 6TH.

At ten o'clock a meeting of the Council was held, at which business of a technical character was transacted. The following papers were then read:—

TREATMENT OF SUSPENDED ANIMATION.

BY B. W. RICHARDSON, M.D.

The author first defined the cases in the following terms. Given a healthy body, in which, without structural injury or change in any part or organ, life has been arrested by suppression of the chemical process of oxidation,—how can such body be restored?

He then described six classes of cases in which such restoration might be expected, but confined his attention especially to two—viz.:

1. Cases where the air has been directly cut off from the lungs, including entrance of foreign body, solid or fluid, and external pressure.

2. Cases of death by inhalation of chloroform and carbonic acid.

He next passed to the consideration of the morbid conditions presented by these different forms of suspended life, describing in detail the morbid phenomena connected with the blood, the heart, the lungs, the brain, and the glandular organs; next, the pathology, general and special, of these forms of death; and thirdly, the modes of treatment.

Of the modes of treatment, he described—

1. Artificial respiration, with air and with various other gases—viz., oxygen, oxyhydrogen, dilute chlorine, and ozonized air.

2. The influence of galvanism.

3. Injection of substances into the circulation.

4 What he terms artificial circulation.

Finally, he dwelt on the action of external warmth.

The summary of all was to the following effect:—

1st. Artificial respiration can only prove of avail so long as the heart is transmitting a pulmonic wave of blood. This over, artificial respiration simply clinches death.

2nd. If a current of blood can be made to traverse the arterial channels, reanimation is possible; respiration following without any assistance, precisely as after birth.

3rd. The application of external warmth has a tendency to induce an arterial tide, and on this point further investigation is urgently demanded.

4th. Galvanism is a dangerous remedy in all cases. Its effects cannot be measured, and although it sets up a temporary excitation, it wears out excitability.

We may excite, Dr. Richardson said, by galvanism on the dead face a sardonic smile; we may make the finger point to any part of the compass; we may extort a deep gasp or startling sigh; but we are doing nothing, or, if are doing anything, it is an act unpardonable in its horror. We are restoring a momentary intelligence which we cannot sustain, making the prostrate body to look into life and to die again.

Finally, the researches showed that, between the period of so called death and the period of coagulation of the blood or of putrefaction, partial reanimation is a possible fact; and if the same rule could be applied to the body at large as is applied to a part of the body removed by accident and replaced—that is to say, if there could be re-established a blood current throughout the whole body, as is done in the part, the whole body could re-live. In a word, that the principle is true, that "that which is of the local is of the general."

Dr. Richardson thus concluded:—"For my own part I am convinced that the day must come when valuable lives, lost now to us in the prime of health, and consigned to their rest, will, by the touch of physiological science, be restored to the activities of existence; and even though we should feel that this great art—this the grandest of all the deeds of the sons of the Æsculapian line—must be left to the ages, there is written in our history this redeeming fact, that what we have not done we have at least conceived, and that, coming upon a world of light previously unknown, we have rent the veil, and seen before us a land on which we would have entered, but for that inevitable law before which the highest intellect bends hopelessly, and the strongest heart pours out its last aspirations."

ANEURISMS OF THE ARCH OF THE AORTA.

BY FRANCIS SIBSON, M.D.,
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The aneurisms of the arch of the aorta, when applied to the ascending, transverse, and descending portions of the arch, present the greatest variety of symptoms. This is due to the very different anatomical relations of the different portions of the arch. The aneurisms of each portion of the arch present characteristic differences. In order that he might seize and classify these differences, Dr. Sibson divided them into four natural groups: the aneurisms at and near the sinuses of Valsalva, and those of the ascending, the transverse, and the descending portions of the arch.

The aneurisms at and near the sinuses of Valsalva, unless they attain a considerable size, or press on the pulmonary artery, rarely give much discomfort, since the adjoining parts of the heart bear slight pressure without much functional injury. The result is that, as a number of these cases (twenty-six out of fifty-eight recorded instances) die from rupture of the sac into the pericardium, many of them drop down dead suddenly, they being at the time apparently in perfect health. When the rupture takes place into the pulmonary artery, the vena cava or right auricle, or the other cavities of the heart,

great distress is excited. If this spontaneous varicose aneurism (following Mr. Thurnam's term) take place between the aorta and vena cava, the head, face, and upper extremities rapidly swell, becoming purple and œdematous; while the lower part of the frame remains of the natural size. When it takes place between the sac and the pulmonary artery, oppression, distress, pallor, and speedy or even sudden death, ensue.

In aneurism of the ascending aorta, when the latter is universally dilated, it is lengthened as well as widened. Since it cannot work its way upwards towards the neck, it makes way downwards towards the heart, which it consequently likewise displaces downwards. The result is that these aneurisms are situated comparatively low down in the chest, and present almost invariably below the level of the manubrium. At the same time, the tumour, obeying the direction of the current of the blood from left to right, and from behind forwards, generally presents to the right of the sternum, at or below the second space.

The same rules apply to saccular aneurisms of the ascending aorta; consequently, while twenty such cases presented a pulsating tumour to the right of the sternum, only eight did so to the left, and nearly or quite all below the second cartilage.

In some cases of general dilatation of the artery from the sinuses to the innominata, the valves, although healthy, are too small to close the aperture of the aorta during systole, and so permit regurgitation. In one such instance there was a diastolic thrill over the right second space, and a loud musical murmur was generated there, and transmitted thence over the whole chest and over the aorta down to the umbilicus in front of the sacrum behind. In this case, as in all cases of exclusive aortic regurgitation, the pulse is audible at the wrist when the arm is raised, a systolic shock being then heard, which disappears when the arm is lowered.

In those cases of aneurism of the ascending, as well as in those of the transverse aorta, which present at the surface, if there is no aortic regurgitation or murmur, there is a double impulse, the one systolic, the other diastolic. Corresponding with this double impulse, there is a double sound—the one the first, the other the sharp second sound. This was present in several of the cases brought forward by Dr. Sibson, and was pointed out successively by Dr. Stokes, M. Guérin, Dr. Bellingham, and Dr. Lyons, and is an important sound, since, while this double shock and sound are present over the aneurism, and the impulse and sounds of the heart are present over that organ, there is an intermediate portion of the chest occupied by lung where there is no impulse, where the heart sounds are feeble, and where breath sounds are heard. There is also corresponding dulness on percussion over the tumour and the heart, with intermediate lung resonance.

The effect of pressure of the aneurism on the vena cava was well shown in one of Dr. Sibson's cases, who presented on admission swollen, purple, and œdematous condition of the head, neck, and upper part of the body. The aneurisms of the transverse aorta present themselves behind or at the side of the manubrium. They are held high up by the great vessels. They are thus distinguished from aneurisms of the ascending aorta, which present below the manubrium. The pressure of the aneurism forward on the left vena innominata is indicated by fulness of the left jugular vein, as in a case of Dr. Alderson's as well as of Dr. Sibson's. In Dr. Alderson's case the deep jugular had adapted itself to the new channels, and had shrunk to the size of a quill. Its pressure backwards on the trachea, or œsophagus, or both, excites on the one hand mechanical dyspnœa, indicated by noisy tracheal breathing, or even "stridor from within," the patient habitually stooping forwards to relieve the pressure, and on the other dysphagia. The pressure of the tumour on the left recurrent excites those most characteristic and frequent signs of the aneurism, stridulous breathing, hoarse voice, and hoarse cough.

The feature of the descending portion of the aorta is its comparative fixity to the bodies of the vertebræ, and the characteristic effects of its aneurisms are, pressure upon and absorption of the bodies of the vertebræ; pressure upon the sympathetic nerves, indicated by a gnawing, permanent, local pain in the back; and pressure on the intercostal nerves in the later stages, indicated by intense paroxysmal lancinating pains forward along the exact course of the nerves. Pressure on the left bronchus, told by absence of breathing and immobility to use the left upper lobe, is another frequent important feature in such cases.

The paper was illustrated by drawings representing the post-mortem appearances in cases observed by the author during life.

ADDRESS IN MEDICINE.

BY W. H. WALSHE, M.D.

Mr. President and Gentlemen,—The weekly medical press, the graver quarterly journals, the semi-annual retrospects, and, above all, the literature itself which feeds the latter, set forth and register the particulars of last year's scientific and practical achievements. Herein abound not merely the signs of that restless activity which will perpetually push to the surface amid large bodies of intellectual men, but the evidence of real substantial improvement. Whether it be in our knowledge of the chemistry, the physics, or the dynamism of disease, the word "progress" is legibly inscribed on the records of last year as on that of many of its recent predecessors. Now, it seems to me that a brief survey of the ultimate causes and mechanism of this modern progress, especially in regard to its promise of durability and sustainment, may not unfitly occupy some portion of our time to-day. The existing advanced condition of medicine and its brilliant promise for the future as a means of positive knowledge, are, I think, primarily and essentially due to the spread of an improved observation among those working at clinical and subsidiary pursuits, to the patience, precision, and minuteness with which facts are investigated and recorded. In days not very far from our own, and even by the most eminent in our ranks, the observation of medical facts was more or less openly contemned; was disdained by pathologists of mark as the fitting task of the patient drudge rather than of the man endowed with intellect capable of working out the alliances and repulsions of those facts, distinguishing their necessary, probable, contingent, and purely accidental relationships, inducing therefrom general results, and co-ordinating these into a system. The correctness of the facts themselves, absurd as this may seem, was treated as matter of small importance; the first-comer willing to undertake the work was accepted on his own guarantee as an efficient and competent observer, while it was reserved for the intuitive aptitude of the systematizer to distinguish and separate the real from the unreal, and arrive at an issue of pure truth from premisses confessedly containing variable quantities of jumbled truth and error. But two causes have been fatal to imperfect observation as a system, whether by proxy or otherwise. The first of these causes is the failure, one after another, of pathological doctrines founded upon it—a failure necessarily entailed by the abiding, inseparable influence of the original quantum of admixed error, and by the impossibility of fashioning a total of truth out of elements partly true and partly false. It has at length been perceived that fundamental unfitness underlies the whole process. The second cause is, that observation is now undertaken by men fitted for the task, by men of large natural and trained endowment: and the toil is undertaken by these because it is now generally conceded, and by them in particular has been intuitively felt, that the work of observation is alike difficult and exalted; that to make an observer requires a combination of faculties as high, though in some sort of a different order, as to make a speculative thinker; that in the mass and main, and as a rule, to observe facts is as lofty an expression of intellect as to conceive thoughts. True, it must be admitted that in some men whom the *mens divinior* illumines, in whose brains a spark of the divine essence scintillates, thought is grandest; it goes before facts, it creates, it defines these, and leaves experience to drag its slow length along to the goal of truth which itself has long since reached. But we speak of the ordinary type of intellectual men—not of those exceptional marvels, of whom some two or three are vouchsafed to the world in the course of a century. The value of observation being granted, its true function in the establishment of medical science being recognised, that the means of conducting it should be extended and improved followed as a necessary consequence. Hence that constant tendency to the employment of instruments of various kinds, characteristic of the clinical investigations of the day—instruments which have enabled us in many cases to estimate the degrees of the objective phenomena of disease with an amount of accuracy, not figuratively but literally mathematical. Hence the change that may be noted in the programmes of our medical schools. The direct education of observers is now made part of their schemes of instruction, the bed-side training of the senses, through which the objective signs of disease become intelligible—the bed-side training of the judgment, whereby the reality of subjective pains may be estimated—the bed-side training of the logical faculty, that enables us to

discriminate between the important and the unimportant, and fix on the true relationships of the complicated perversions of function and of structure we are called to unravel. Coevally with this practical recognition of the place held by observation has arisen proportionate distrust of the efficiency of the deductive method. The abandonment of this method has followed. At last, we have acknowledged that in medicine there are no first principles, within reach of human intellect at least, wherefrom we can descend to facts *ad libitum*; there are no axioms in our science wherefrom we may fashion theorems and deduce propositions that shall suggest physiological and pathological facts, and establish a doctrine of disease prior to experience. We have even recognised the cardinal principle, that whereas in certain other branches of human knowledge the deductive and inductive methods of obtaining truth are both applicable, in fact, reciprocally sustaining, the one often supplying what the other is unable to give, in our sphere of mental work the smallest step cannot be safely made by the light of deduction. We begin from individual facts, and rise to those general inferences which are our most comprehensive expressions of attainable truth. How different the mode of proceeding in that purely deductive science which deals with the properties of space and number! Here the beginning is with axioms—that is, with propositions by assumptions, so absolutely true as to be genuine truisms, and upon these axioms are founded the details known as geometrical science. True, there have been persons credulous of the reality of first principles, *quasi* axioms of pathology—persons who have actually manufactured these, and attempted to deduce therefrom clinical developments of disease. We have abstract principles of animism, Stahlianism, Broussaism, &c. We have had the deductive method exhibited in the concrete form by Cullen in his fanciful account of synocha—a disease which he neither professed to have encountered himself nor maintained to have been seen by others, but which, on the faith of his "Principles," not only must exist, but must assume the characters, run the course, and affect the modes of termination which he invents as he goes. Such achievements as this have had their day; they are not likely to be revived. But it supplies us with a useful lesson or two. Observe the easy indifference about truth, as conceived by most minds, involved in a procedure such as that of Cullen; and yet no real proclivity to falsehood existed in that man. He was probably as honest in his veneration of truth in the abstract, as the most painstaking Baconian that ever stood, thermometer in hand, by the bedside of a pyrexial patient, and trembled lest he should misinterpret by the tenth of a degree the temperature under the tongue. He was no more dishonest than the keen-witted philosopher, Hume, who, both in morals and political economy, went the length not only of preferring ideas to facts, and professing indifference bordering on contempt both for the process of their collection and for themselves when collected, but of maintaining that when the preconceived ideas of deductive philosophy and the actual observed facts clashed, the collision was unimportant: facts must yield, theory hold its sway unchanged. No, it was not the man, but the system that made light of truth. Cullen and Hume were both equally innocent of designed mendacity.

Again: it is curious to observe that just as in other branches of knowledge—in theology and in morals, for example—so in medicine. Wherever and by whomsoever deductive philosophy was professed, a sort of terrorism was invoked to suppress the right of private judgment—to make the *sic volo, sic jubeo, stet pro ratione voluntas*, reign supreme. Note the dogmatism of Broussais—splenetic, overbearing, and intolerant. See him denounce all theorists but himself, and revile searchers after facts, just as certain speculative theologians proclaim that tolerance for any creed but that fostered by themselves is positive impiety. Do I exaggerate in affirming that a few years past it was a work of danger—a sort of chivalry in the field of science—to oppose the prevalent dogma of the so-called physiological school; that a man who failed to comprehend was simply regarded as a dolt, while he who ventured to question took his place amongst the crazy ones of his day? But if we may fairly assume that the deductive method is banished as an acknowledged scientific instrument from the domain of pathology, it is equally certain that indications of an unfortunate disposition to return to it every now and then make their appearance; and yet there can be no reasonable apprehension that any *à-priori* system of pathology will again take serious hold of the professional mind, if men will for once, for once only, accept the warning offered by the history of the past. That history not only teaches us the absolute failure of all such systems, but shows that so long as deductive methods prevail, all progress must, if not solely, at least essentially, consist in the destruction of something that has gone before—the energies of genius must be wasted in negativing the errors of the past. It is noteworthy enough that the story of medical progress in this aspect gives feeble support to, nay, almost clashes with, the opinion held by some speculative historians who regard the dominancy of inductive reasoning as especially characteristic of the Anglo-Saxon mind. The general proposition may be true, or it may be false—I rather think the former; but unquestionably the Celtic mind of France has taken a very large, if not the largest, part in establishing the supremacy of induction as the real instrument for discovering medical truth. Nor, Mr. President, must we forget, as an element of modern progress, that the true function of hypothesis has been fixed: on the one hand escaping the grave fallacy of the deductive system, which first assumes the hypothesis, then assumes its absolute truth, and next reasons down to facts; on the other, we have learned to steer clear of the almost equally serious error of rejecting hypothetical propositions altogether. Hypothesis is now valued at its worth: it is accepted as an instrument of suggestion; it is welcomed as a clue which guides the senses in the observation of facts, and so saves frequent waste of time and energy in the search after, and registration of, particulars that bear little or no relationship to each other, and must *pro tanto* prove insusceptible of furnishing general conclusions. We are at the present day, also, fully alive to the danger of too freely utilizing hypotheses, even in this subdued and suggestive fashion. We have learned to acknowledge that it is often difficult to resist the temptation of squeezing facts to fit the hypothesis for which, as a creation of our brain, we entertain much of the tenderness of a parent for his offspring, and which we cannot be expected to sacrifice without a struggle to the pitiless logic of facts. Hence, perhaps, it is that many of the most solidly established propositions in pathology have been induced from pell-mell accumulations of individual facts heaped together independent of any pre-formed idea whatsoever. Look, in illustration, at several of the most striking amongst the pathological laws discovered by Louis, which, taken alone, would suffice to disprove the notion held by some thinkers, that the search after a generalization involves as a necessity the conception of an hypothesis. No; not only were the primary facts sought without guiding hypotheses, but, in many instances, they were thrown into groups by a natural process of attraction, untrammelled, unthwarted, and uncontrolled by any preconceived idea. Still this circumstance does not negative the value of hypothesis cautiously employed in the suggestive sense. Only let us not take ideas for facts: ideas should be accorded a large place, submitted to the touchstone of experience; never rejected without trial, unless on the very surface they bear the stamp of error, or adroitly seek to conceal an under stratum of folly. In this sense, but in no other, ideas may be welcomed; still so few are the men capable of conceiving such ideas as shall withstand the rude test of experience, and so much fewer are the men who, were their theory annulled, would calmly relinquish its propaganda, that I for one should grieve to see inscribed on the portals of Medicine any epigraph—no matter what venerated authorship it might claim—deifying ideas. I refuse to concede with Wieland, as far at least as medicine is concerned, that "the situation of the most enchanted enthusiast is preferable to that of the philosopher who, from continual apprehensions of being mistaken, at length neither dares affirm nor deny anything." No, not preferable in the domain of physic. False theory must be worse than no theory at all, in a sphere of knowledge where speculation entails action—where the practice of an art flows from the doctrine of a science.

And so we pass on to the next cause of existing progress—the recognition of the true significance of so-called pathological laws. When Louis first promulgated a series of general propositions on which this title was bestowed, the word was accepted in a more absolute sense than it can fairly command. It was supposed by some ardent persons that these laws were as stable as those of the growth, decay, and death of the organism—nay, as the physical laws of the universe. It came to be held that it would be well-nigh as positive an infringement of the order of nature were tubercle found in any other organ of an adult whose lungs were free from that product; as if the movement of bodies were detected in infraction of the law of gravitation. But the day of these delusions has passed away. We now know that those general results which we take for the expressions of pathological laws in the sense of fixed, forced, predordained and immutable relationships of antecedence and consequence, (without reference to those deeper metaphysical meanings that underlie the idea of law,) have nothing of this scope, of this absolutism, of this grandeur. A larger experience than that which originally worked out these presumed laws

has shown that they are not laws at all in the higher significance of the term. A law of nature knows no exceptions. The so-called pathological laws, on the contrary, are subject to perpetual exceptions; in point of fact, they are at best the generalized expressions of degrees of frequency. When we say, for example, it is the law of such and such a disease that such a combination of circumstances occurs in it, we really mean no more than that in a certain calculable majority of instances of that disease that combination will occur. Now, in thus relinquishing the ambition of establishing laws of pathology assimilable to and co-ordinate with laws of nature, we appear, instead of advancing, to have receded. The progress here savours somewhat of a negative quality it is true; but the ultimate value of surrendering vain pretensions has in all sciences been positive. Closely linked to this improvement, allied to it in nature, stands the corrected estimate of the men of to-day concerning the true import and value of the numerical method, especially in its application to clinical medicine. So long as any one mode of combination of certain clinical facts and conditions can only be spoken of as more or less frequent than another or other possible combinations, the want of definiteness in the idea and in its expression wholly deprives both of either scientific or practical significance. But the case is changed once, by the aid of the simple process of counting, a distinct numerical value is substituted for the vague words "more" or "less;" for conceding, as we have already done, that these numerical expressions of precise degrees of frequency do not carry with them, either directly or inferentially, a revelation of laws in pathology, still they most certainly present average combinations of phenomena of disease in the mass, and so oftentimes furnish most valuable peeps through the obscurity surrounding the natural affinities and repulsions of morbid processes. Now these numerical expressions are, of course, perfectly sound so far as the particular mass of facts from which they were derived is concerned, and they will continue to be sound if applied to a fresh mass of cases of the same nature arising under similar conditions. But a function of more practical importance than this was at one time assumed for them. It was supposed that numerical expressions signifying majorities of variable strength might be subsequently applied in individual cases with almost unfailing surety. Is this the fact? I fear not. It may, for instance, be perfectly true, is perfectly true, that in the great majority of instances chronic peritonitis in the youthful adult is not only diathetic, but especially attached to a certain diathesis—the tuberculous. If not a law, which certainly it is not, this is at least a rule; but if we apply this rule to individual instances, and attempt by its aid alone to found the diagnosis of tuberculous peritonitis, possibly in the very first instance that comes before us of a character to test the point, our faith in averages, as applied to individuals, may be destined to be rudely shaken through the discovery that the chronic peritonitis before us sprang from cancerous and not from tuberculous seed. Now in the recognition of the practical danger of a too absolute application of averages to individual instances there is progress. Some years past there existed much too great readiness to trust to these averages as sure elements of diagnosis. Let us not, however, run into the opposite extreme of undervaluing them. Even in this clinical sense they are of great subsidiary importance, and should never in the balance of *pros* and *cons* in a difficult diagnosis be omitted as more or less serious items of evidence. But, gentlemen, in stimulating, sustaining, and guiding these means of improvement in medicine, is found what may be emphatically termed the dominant intellectual quality of the age—the spirit of philosophic incredulity and of independent inquiry, and the absolute rejection of authority. The active faculty of doubting has acquired vigour, the passive endowment of blind faith has dwindled into decrepitude. Formerly we had a minimum of knowledge and a maximum of credulity; now, we have an ever increasing quantity of fact and involved inference, that is of true knowledge, and a perpetually decreasing aptitude to take things on faith. As in theology and in morals, so in medicine; the conservative spirit has until of late years been almost omnipotent. To the mass of men that which is "grey with years is godly," and in no sphere of knowledge has this been more distinctly felt than in the medical. But of late we have escaped from this sort of willing bondage to the past; the time has gone when it was the highest merit to discuss with acuteness opinions of writers who had gone before, illustrate their surface sense, search out their deep significance (often where none existed), and, in a word, comment through opinion on opinion, *ignotum*, as it were, *per ignotus*, with scantiest reference to original fact. These were the palmy days of tradition and its commentary. True, the spirit which feels that any given doctrine is not of necessity sound, simply because protected by the ægis of respectable names—the spirit without which the world would never have seen a Galileo, a Columbus, or a Martin Luther—is to be found frequently struggling for existence in the bygone historic and relatively recent periods of medicine; but of late years only has that spirit become absolutely dominant. No amount of past achievement, no perfection of intellectual brilliancy in a teacher, no universality of belief in any particular man's endowment, no humility of hero worship, will save any opinion, any creed, any statement of alleged facts, from the critical revisal of the humblest and newest worker in the field, or protect one or other from inevitable destruction, if that revisal detect a flaw. And so the day is gone by when honest medical men could be found the active or passive supporters of flagrant absurdities, absurdities made decent and becoming by high-placed assurance of their wisdom. When that remarkable sovereign William III., in so many aspects advanced beyond the spirit of the age he lived in, strove to discountenance the superstition of touching for the evil, he was almost the solitary man of mark in his dominions who at once felt the stupid inanity of the practice, and dared run counter to the popular tide of folly. On one single occasion he is reported to have yielded to importunity, and to have laid his hand on a patient; but on that occasion he at least soothed his moral and intellectual conscience by uttering the remarkable words, "God give you better health and more sense!" "Theologians of eminent ability and virtue," says Macaulay, "gave the sanction of their authority to this mummery"—a fact at which the distinguished historian does not appear to profess any particular marvel; but he does signify his wonderment that medical men of high note were to be found among the supporters of the delusion. And yet, as long as the system of authority in matters of opinion prevailed, how could it have been otherwise? While certain sections of the Church consigned even William himself to perdition, by stigmatizing him as an infidel because he refused to believe that the touch of a particular finger could destroy a constitutional disease, it seems well conceivable that the struggling disciple of Æsculapius might not, simply and alone, have felt it inconvenient and dangerous to expose the imposture, but that his intellect might have been at length mastered by his fears, and that he actually ended by believing in the folly at which his common sense and experience originally revolted. And if things are now changed, if the medical profession as a body stands as the practical bulwark of the present day against superstition of all kinds, the reason is, because they have shaken off the tyranny of authority, because they have learned to think for themselves, because they have recognised and utilised the elevating lesson conveyed in the sagacious and eloquent words of one of the greatest English prelates, Bishop Hoadley:—"Authority is the greatest and most irreconcileable enemy to truth and argument that this world ever furnished forth. All the sophistry, all the colour of plausibility, all the argument and cunning of the subtlest disputer in the world, may be laid open and turned to the advantage of that very truth which they designed to hide or to depress; but against authority there is no defence. It was authority which would have prevented all reformation where it is, and which has put a barrier against it where it is not."

Such, it appears to me, Mr. President, are some of the essential causes of modern progress. The greatness of medicine appears to be indicated in the very character of the conditions that make the ground work of that progress. But is that greatness felt and acknowledged by the world without? To the consideration of this question I propose to devote the remainder of the time that we shall be together to day. Among those beyond ourselves who profess to think at all on the subject of medicine a very general opinion prevails that it is a study of limited scope, but feebly exercising the mental powers. The uncertainty of physic, registered even in professional aphorisms, is appealed to in vindication of the opinion that it holds a low place among the various branches of human knowledge and inquiry. Its practice is disparagingly contrasted with that of the bar, which, it is averred, calls into play all the higher intellectual attributes, and requires besides the gift of ready expression—nay, of eloquent speech—that these attributes may be employed with the maximum amount of advantage. But, above all, the lay reasoner, who alights medicine, fancies he has settled its intellectual claims by affirming that it is not a science. Not a science! True and false. True, unquestionably true, if we limit the term to systems of knowledge so perfect that from first principles we can reason down to individual facts prior to the actual observation of these, and then by the facts themselves when observed, demonstrate the absolute truth of the principles which enabled us to foresee and predict them. This

prescient faculty, which is the familiar power of astronomy, does not appertain, and conceivably never can appertain, to medicine, and in this sense medicine lays no claim to rank and title as a science. The leading character of astronomy—the faculty of predicting individual facts as well as classes of facts—lies beyond our sphere. Let us see how near to this *Ultima Thule* of perfection we can reach. We begin by observing facts indiscriminately. We find that these, by reason of certain affinities and resemblances, certain repulsions and differences, subdivide themselves into natural groups. By scrutiny of individual facts forming these groups, we find certain of the number distinguishable by special characters from the rest, and arranging themselves in sub-groups; and by continuing this process an indefinite number of times, varying with the nature and complexity of the original ground from which we started, we reach the individual facts again. By comparing groups and sub-groups of facts together, we succeed in tracing a clue to their alliances and repulsions; and, once possessed of the clue, we can by its aid predict with very considerable probability the future modes of grouping of similar facts under similar conditions. But we cannot do this with surety, and we cannot predict for individual instances. For example, we have learned to foretell, from the observation of masses of cases of pneumonia, from successive groupings and sub-groupings of these, that under given conditions of age, sex, constitution, season of the year, antecedent health, mode of treatment, &c., the rate of mortality will stand at a certain per-centage; but we cannot even approach to certainty in determining what place a given individual shall hold in his class—whether he in particular is to live or to die. Here we are reduced to the calculus of probabilities, and prescient science is at an end. But upon the same reasoning title may be refused, though with less absolute cause, to chemistry. The reaction of bodies cannot be always predicted prior to their being brought into contact out of general principles. If all forms of inductive knowledge are to be refused the rank of sciences, we must accept the sentence for medicine, and content ourselves with such comfort as may be derived from the excellence of the company in which we fall.

Now, in point of fact, though this decision against the claims of medicine to the title of a science is very much the settlement of a baseless dispute,—a dispute about words,—it leads, I cannot help thinking, to an important issue—to more than one important issue. Because medicine is not a pure science after the manner of astronomy, the further conclusion is jumped to—that it has no claim to a high place amongst intellectual pursuits at all; that its attainment is easy; that its cultivation requires but little peculiar training of any kind, and none of a lofty order. All this appears clear to the public mind and to official shrewdness; and hence follow some curious consequences. Unless on this ground, it appears to me impossible to understand the leaning of Government repeatedly exhibited to hand over to the charge of persons without medical education the conduct of public inquiries in their essence purely medical. How else can we explain the fact that when, some years ago, the Horse Guards—better things exist there now I know—determined that there should be a statistical investigation into the health of the army, the management of the inquiry was entrusted — to whom? To a captain in the service, whose education and antecedents—estimable officer though he doubtless was—could scarcely have been of a kind to qualify him for a searching scrutiny into pathological facts. And how else than on the notion that medicine is not a science, and that its pursuit demands no scientific training, can the recent singular attempt of certain legal members of the Legislature be explained—an attempt by which, if successful, skilled medical opinion would henceforth and for ever have been excluded in cases of lunacy? True, this is not the overt motive; but that it is the real and underlying, though hidden, cause, there can, I think, be little reasonable doubt. The more ostensible, indeed the actual, avowed, main reason is this: It is said that the contradictions of medical experts *inter se* are so constant and so flagrant, that jurymen are likely rather to be led astray by the conflict of their opinions than guided by the clearness of their technical knowledge; that the task, puzzling enough to an ordinary juryman, of weighing and combining facts and interpreting clearly undisputed professional evidence concerning those facts, becomes impossible if, in addition to all this, he be called upon to choose the true, or the nearest to the true, amongst a host of irreconcileable dogmata, and, as elements of, and guides to, this choice, he be required to determine the relative credibility and relative scientific competency of opposing skilled witnesses who hold opinions mutually subversive. It may be conceded in honesty, that here is a difficulty; but the *onus probandi* that this difficulty makes the chances of the juryman failing to reach the right conclusion greater than it would be without such conflict of opinion, rests with those who oppose skilled testimony. Now, they have never made even a reasonable approach to proving this. And those members of the bar who not only take this view hostile to medical opinion, *quoad* lunacy in the abstract, but urge its practical adoption, appear to me to have overlooked two most important consequences of such adoption. They forget that witnesses as to matters of fact—how often have we all of us noticed this in courts of justice!—witnesses to matters of fact, thoroughly honest, conscientiously desirous of stating to the letter that which they believe to have impressed their senses, often contradict each other; simply because observant power and the conditions under which it is at one and the same moment exercised by different people, more or less widely vary. If the bar were logical, they should then plead that witnesses as to matters of fact might henceforth be silenced. They forget, too, that the very arguments used to prove the inapplicability of scientific evidence in matters medical, apply with equal force to skilled opinion in every term of legal inquiry. Who has ever been present at investigations into the causes of a railway accident, without listening in bewildered astonishment to one learned engineer pooh-poohing with patronizing scorn the plain statement of the equally learned engineer on the other side? Have you ever chanced to hear architects disporting themselves in scientific opinion concerning the foundations of a house? I have. Did the architects and surveyors subpœnaed in the case of the Tottenham-court-road fall of houses, some few years since, absolutely agree in their opinions as to the mechanism of the catastrophe? or did they contradict each other, not only as to matters of mechanical principle in building, but as to the apparently simplest and pettiest details concerning brick and mortar? Had the forensic crusade against scientific opinion in cases of lunacy proved finally triumphant, then should, as the logical consequence, all forms of skilled testimony be henceforth banished from courts of justice. And again, the lawyers forget, that if ever there was an instance in which the *tu quoque* argument could be used with crushing force it is this. What! they who never can agree, who differ in points that to the common sense of mankind seem plain and self-evident—they, of all men, deny the worth of skilled testimony altogether on the part ground of nonconformity in the opinion among those giving it! Listen to a single instance of the degree to which the opinions of the most eminent interpreters of the laws may clash. A man enters into a contract of marriage. Shortly after the contract has been duly and legally made, he is seized with hæmoptysis of the gravest character. All the symptoms of rapid pulmonary consumption follow. He declines to marry on the ground of this change in his health. The lady proves recalcitrant, and eventually brings an action for breach of promise. The medical and lay evidence goes to prove that the defendant could not proceed with the marriage without probably inflicting mischief on himself and possibly even endangering his life. The jury accept this view, and find a verdict in his favour; absolving him, in fact, from his engagement. But the judge reserves a point of law after this fashion (and there is not a more learned judge adorning the bench than the judge before whom this case was tried)—"It being fully conceded, through the finding of the jury, that the defendant would have jeopardized his life by fulfilling his contract, was he legally justified by that danger in withdrawing from its performance?" The question was sent up for decision to the court above; there the presiding judges differed. Subsequently the moot point was referred to the thirteen judges, and in this learned conclave the difference of opinion reached the conceivable maximum; for not only were six of the number for the defendant and six against him, the presiding judge giving his casting voice, but the individuals of each group of those who agreed on the main issue disagreed as to the grounds leading to their agreement. The arguments by which the learned persons supported the same opinion not only seriously differed, but in some instances were mutually destructive. The very argument which led one judge to the conclusion he adopted would have led another, adopting on different grounds the same conclusion, to reject it. And these are the men who would silence medical opinion in courts of justice on the ground that it is not always consistent. Now, it is not a matter of real importance to the issue; still it is not unworthy of passing notice how small is the claim of the bar to deal severely with the imperfections of medical knowledge. They find it a hard task enough to master their own written code of doctrine; nay, they often even fail in this. They might, then, it appears to me, have a more sym-

pathizing regard than they habitually display for men whose sphere lies in the unwritten secrets of physic.

See the difference in the problems with which we have severally to deal. We are called upon to penetrate the obscurest mysteries in the creation, the most entangled complications in the most elaborate of God's works—the diseased actions and conditions of the bodily and mental man. Painfully toiling step by step at phenomena, which, to our limited ken, are perpetually clashing with and veiling each other, assuming new forms—chemistry, physics, and special dynamism associated in the most subtle combinations; they deal in the main with what they themselves manufacture, the laws of the statute-book and formal precedents, things that are marked on the surface and deeply into their substance, with all the relative pettiness of human productions, and yet they are perpetually warring in their interpretation of those very small matters. We have to discover the hidden, the unknown, the uncontrollable; they to interpret the obvious, the known, the conventional; and yet to their own deficiency in the performance of this comparatively easy task, they are proverbially purblind, whilst to the least trip on the part of those who deal professionally with the obscurities of physic they are lynx-eyed. And there is a third contradiction to which the forensic logic that would exclude medical opinion in the case of alleged lunatics directly leads. Inasmuch as a conclusion must be drawn by the medical untrained jury from the facts, and without any aid in the interpretation of those facts from persons whose previous business in life is to study such facts, the bar become partisans of the general doctrine that the man who knows least about any given subject is best able to form a sound opinion concerning it. How this *reductio ad absurdum* is to be evaded, even by legal sharpness, I confess appears to me impossible to imagine. If it be urged, that in many instances of alleged lunacy, where the legal question of competency to manage affairs is an essential question, the case is often a complex one, other matters besides psychical peculiarity being mixed up with the inquiry; if it be pleaded that there may be and often are circumstances lying without the pale of purely technical interpretation which may be as clear to ordinary men as to those specially trained in cerebral pathology, and which furnish their contingent to the total judgment; if this be urged, as it is known to be urged in the very highest quarters, the answer is easy; for, obviously, any argument to be found here simply amounts to this, that one important element in a verdict is to be neglected because other evidence besides itself exists and may be utilized. Another objection made to the admission of skilled opinion in cases of lunacy is that medical observers, having arrived at certain crude disjointed theories concerning insanity, must perforce take certain views in individual cases accordant with those theories, and that consequently their argument is assured in the form of actual advocacy before the facts. But in the first place, this objection, if well-founded, would be equally fatal to the evidence of professional experts of every class; and consequently one of two things—either the facts are clear, self-evident, well-defined, when theory would not be wanting, or the facts are obscure, entangled, and imperfectly defined, when the theory, if wrongly obtruded by the medical witness, will prove totally without influence on the minds of the jury. To this fragmentary notice of the subject of skilled testimony in cases of lunacy I must limit myself on the present occasion. I have merely glanced at some, without even remotely pretending to have exhausted the consideration of any one, of the numerous fallacies of the opponents of such testimony; but I think I have said enough to make it at least strongly probable that the commonly paraded objections would not have taken the form of practical and active opposition had they not been sustained and encouraged by some form of support in the back-ground, and that support I believe to be furnished by the prevalent notion, probably specially prevalent in the legal profession, of the non-scientific or feebly scientific character of our pursuits.

In its general relationships to the march of civilization, how is medicine regarded by the lay world? First let us ask ourselves what are likely to be the claims of medicine in regard to the civilizing process, and what, in general terms, may be set down among its actual civilizing achievements? It cannot, apparently, be questioned that civilization has been the highest where intellectual development has obtained its maximum. This seems to be predicable not only of different countries compared with each other, but of the same country at different periods of its own social evolution. The history of the world points to a direct ratio between vigour and buoyancy of national intellect, and activity of material advancement; but the vigour of intellect could only be practicably useful in so far as it is used for the discovery of the truth of things. Truth, then, is the real factor of civilization. In proportion as it is worked out, so has advanced, or will continue to thrive, civilization. Now medicine has, except in the rarest instances, exhibited itself in the van-ground in the honest search after the truth of Nature as she is. To the medical philosopher, truth, irrespective of the consequences to which its discovery may seemingly or really lead, has ever been the ultimate object. In this aspect, the calling he exercises, as also the method and manner of knowledge on which that calling rests, stands at the absolute head of human pursuits. Contrast him with professional theologians, ever dreading lest some new revelation of Nature's ways may falsify some cherished dogma, and consequently often exercising their fullest influence to thwart the demonstration of those laws which the Creator has designed for the regulation of the universe. Remember Galileo! See of what dignified, honest life, medical work is composed in comparison with that of the professional advocate, who starts on his career with the fact staring him in the face that, on the doctrine of chances, one half of his future years must be passed in advocating error, and making the worse appear the better reason. What intellectual training is that of the medical observer compared with that of the diplomatist, the quality of whose aspirations after truth may be gathered from the well-known apophthegm of one of the most successful of the class,—that the use of language was to conceal our thoughts. Compare the medical thinker, again, with some self-elected teachers of psychical philosophy, who, revelling in the wantonness of undenied intellectual power, write "Strange Stories," all well-fitted to shake the foundations of belief, and to destroy perception of the differences between the real and the unreal in persons of feebler organization than themselves.

It seems impossible, then, that in intellectual guidance and in civilizing influence the medical philosopher could do otherwise than hold a high place, or take other rank than amid those bands of inquirers who search for primal truth, fearless of consequences—among mathematicians, moralists, political economists, and statisticians—among the foremost, though often unseen, movers in the march of progress. The civilizing influence exercised by the medical profession in maintaining the bodily vigour of the individual citizen, in suggesting and perfecting the means for his physical development, in securing a healthy mind in a healthy body, in proposing measures of State utility wherever considerations of public health justify his interference, occasionally modifying the penal code in the sense of mercy—these are overt services, to be seen of all. Less obvious, but not less real, is the truth that medical inquirers have been pioneers leading to the general adoption of the numerical method of moral, social, and political inquiries, the utility, nay the necessity, of which appears to have been first seriously felt through the proofs given by Louis, that pathological facts which from their nature seemed to be insusceptible of the process might be made the subjects of numeration, and so forced to furnish inferences of deep practical significance, unattainable by any other means. But I believe the unseen, intangible, underlying influence of the earnest truth-seeking quality of medicine plays a yet loftier part than any of its overt achievements in promoting the great cause of civilization. Still, gentlemen, all this has been little recognised. Within our own ranks there have been few to receive it.

Occupied with effecting a progress, rather than estimating its mechanism, we have said little of our own claims as human civilizers. Lay notices, especially in this country, of the part we have played have been, as might be expected from much that has been already said, to the last degree scanty and unsatisfactory; but a lay historian has at last appeared upon the field who has not only himself felt, but endeavoured to make others feel, that medicine *quoad* civilizing influences, has not existed in vain—has not been cultivated by some of the greatest among ancient and modern observers and thinkers without in some measure influencing cotemporary civilization. Henry Thomas Buckle, in the introduction to his vast proposed survey of the influence of human knowledge on the material progress of man, has assigned to medical philosophy its place in contributing to the civilization that we glory in to-day. To Buckle, indeed, we are indebted for first giving form in print to the idea of a history of medicine in its relationships to civilization; and probably in no pages of his immortal work does that philosophic eloquence which marks its style, that fitness of expression to ideas—such fitness that no word can be changed without weakening the force or making the sense less definitely clear—show forth in stronger relief than in some of those devoted to medical questions. And yet did not Buckle, with all his original genius, with all his keenness in seeing the

reality of things and separating the substance from the shadow, with his faculty of close reasoning, now suggestive, now exhaustive, with his power of judgment at once brilliantly acute and logically sound—yet did not Buckle, with all these high endowments, avoid error in dealing with matters medical. And, as it appears to me, his mistakes are traceable especially to two causes, to which reference has already been made; and further, as his falling into these mistakes furnishes apt enough illustration of the views I have taken, of their ordinary manner of causation, a very few words concerning their actual nature will not be misplaced. In the first place, Buckle's was an eminently deductive mind. In every stage of his argument this quality forces itself upon the reader. He starts from speculative opinions, then seeks for facts whereby to sustain and verify them. Well and good! capital! excellent! so long as the facts are of the kind desired; but when facts of an untoward kind present themselves, either in their own intrinsic simplicity or through their connexions with consequences hostile to the deductive base of operations, as it may be called, Buckle has no compunction about throwing them aside as if they were false or valueless. For instance, hereditary influence is a fact standing inconveniently in the way of certain dogmata: its reality is at once denied, and so one of the plainest experimental results in the whole domain of biology, healthy or morbid, is set at naught. Again, it happens to be incompatible with certain views of the causes of great politico-theological events, that the influence of race should be recognised: race is contemptuously thrown on one side—race, that element in the compound condition of man's existence, to which an unbiassed survey of the events of history gives a leading place among the rulers of destiny, is spurned as scarcely playing even an insignificant part in the drama of the lives of nations.

In the second place, Buckle wanted special knowledge. He had not been trained in the observation of disease at the bedside. He had read of it—he had mused on it—he had not observed it; and it is a beautiful study for ourselves to see to what extent a man of enormous intellectual force can reach in the comprehension of disease without having actually watched it. I know no more beautiful study in this respect than Buckle's book. To this want, combined with the deductive leaning of his mind, must be ascribed his lending his influence to the sustainment of that, as it appears to me, grave fallacy, that pathology may be manufactured out of physiology prior to experience. Technically ignorant and deductively acute, he would have no difficulty in admitting that the combinations of disturbed dynamisms and changed structure, which make up disease, might be framed *ad libitum*, prior to experience, out of elementary data of healthy anatomy and physiology. The experience of a few weeks in the wards of an hospital would have taught him a different lesson. He would have recognised that, all-important though physiology be, its scientific function, *quoad* its pathology, is a humbler one than that of creating; he would have found that physiology supplies a standard of comparison for morbid conditions—that it may furnish explanations of those morbid difficulties as they arise, and that it may suggest subjects for clinical inquiry; but he would have found that creative faculty it has none. Still, in glancing at these shortcomings of Buckle in respect to certain points of medical logic and philosophy, let us not forget our debt of gratitude towards him. It is a singular fact—I make the statement defying contradiction—it is a singular fact that the deep influence exercised by Bichat on the advancement of scientific medicine—and on the sciences of observation in general—has never been so clearly defined, still less so eloquently expressed, by any medical writer as by Buckle; nor has the genius of Hunter ever received a nobler tribute than that raised to his memory in the fervid pages of the lay historian. Here, Mr. President, is not the place to chronicle the life of Buckle—to analyze his original gifts of mind—to marvel at the variety and profoundness of his scholarship—to hold up for the well-nigh worship of the young his power of concentrated and enduring toil, his self-denying existence of student seclusion—to sympathize with his scorn of sycophancy to the accidentally high-placed who have greatness thrust upon them—to ring the echoes of his Saxon devotion to glorious liberty—or to mourn in bitterness of grief over that untimely death, fatal to the completion of perhaps the grandest literary effort ever conceived by the mind of man. But this is the legitimate place to speak of Buckle in the aspects a moment since referred to. Buckle has in truth bound himself to us; he has bridged over the chasm that separated the medical from the rest of the scientific world; he has made clear to all whose understanding is not thoroughly obtuse that there is something lofty and ennobling in the study of the human structure in health and disease—that it involves forms and varieties of inquiry almost co-extensive with human knowledge, both giving and receiving in all conceivable directions.

Finally, Mr. President, I have endeavoured thus to show to what causes the evident progress of modern medicine is substantially and in ultimate analysis due; and it appears, from the limited survey undertaken, that these causes are of the most promising kind for the future of our science. Medicine has, in truth, not advanced of late years from the exceptional achievements of any single individual gifted with extraordinary powers. Were it so, the continuance of progressive movement could not legitimately be looked for, as Providence but rarely sees fit to create specimens of the highest attainable power. No; our advancement has sprung from the substitution of one true for many false systems of duty—of one true system, which is capable of being efficiently wielded by that multitude of men, no doubt with well-marked intellectual aptitude, honesty of purpose, zeal of character, and vigour of will, who are day by day added to the ranks of physic—earnest workmen for humanity's good. And I have also produced some evidence that the importance of medicine as a portion of the vast edifice of human knowledge is beginning, not only to be vaguely guessed at—to be lightly and passingly touched upon—but to be seriously and systematically stated by laymen of the deepest reach and most brilliant quality of thought. By this recognition of the nobleness of our studies, we are raised in the social aspect, and a worthy and kindlier reciprocity of scientific interest between ourselves and the world of other professions for ever insured. Our civilizing mission is acknowledged and proclaimed; and so when we look around on other pursuits, and watch the men engaged in them—while we admire the toil and sympathize with the toilers, we need feel no discontent with our own; we need not regret that we fill a place in the band of those who strive to lighten the mighty weight of physical and mental woe that afflicts our kind; but with something of the earnest and exalted pride that in his art animated a Correggio, each of us exclaim, as we ponder over the achievements of our years, "And I, too, tread the paths of physic."

On the motion of Professor Bennett, seconded by Dr. Bowes, a vote of thanks was unanimously accorded to Dr. Walshe.

The Report of the Medical Benevolent Fund was read by Mr. Toynbee, which stated that the total amount of bank stock standing in the names of the trustees was £4450. The number of annuitants was twenty-four, seventeen of whom received £20 a year, five £15, one £13, and one £10. The sum distributed during the past year in donations was £967, which had been divided among ninety-seven cases.

The Report was unanimously received.

After a brief pause, during which an excellent luncheon was served to the numerous assemblage, a paper was read, of which the following is an abstract:—

THE SUCCESSFUL TREATMENT OF ANEURISM BY FORCIBLE FLEXION.

BY ERNEST HART, ESQ.,
SURGEON TO THE WEST LONDON HOSPITAL.

Soon after I had the honour, in a paper at the Medico-Chirurgical Society, of introducing to the profession in this country the method of treating popliteal and the like aneurisms by forced flexion, I was much gratified by observing that, at a branch meeting of the British Medical Association, a distinguished provincial surgeon—Mr. Prichard, of Bristol,—having taken note of that communication, had essayed the method, announced the success of it in his hands, and stamped it with his approbation. Now that this method has been for some short time on its public trial, and that it has entered—I hope I may venture to say it—into the recognised practice of surgery, a very brief *résumé* may not be unacceptable to the Association of what I take to be the principles of its action, and of the results of its application.

The cases in which I am cognizant of its having been successfully employed are now ten in number. They are all cases of aneurism of the extremities, for the most part popliteal. Indeed, by the nature of this method of treatment, its application is confined to the extremities. But here the general law of position of the great arteries to some extent favours it. Aneurisms in the limbs are most commonly seated on some one of the larger arteries of transmission: these follow a definite law of location. Arteries of distribution do not follow any definite course; they, however, are more rarely the seat of aneurism.

Of the arteries of transmission—those which commonly are affected with aneurism,—it may be observed that they are always placed on the side of flexion in the limbs. In the upper limb, where bending takes place in the successive joints in the same anterior direction, the artery continues on the front surface. In the lower limb, where the contrary occurs, it winds round the bone to gain the same situation in the fold of the joint. Thus at these various joints the artery is, within certain limits, likely to be similarly affected by flexion.

The effect of forcible flexion of the healthy arm or leg may be observed in the considerable retardation of the blood flowing through the main artery, and the almost extinction of its pulse. In explanation of this circumstance, it may be well to recall the physical laws bearing upon it. It will be remembered that there are two main impediments to the flow of water, or a like fluid, through a tube. The first is the diminution of gradient; the second is an increase of friction due to any cause whatever. Now a curve in such a tube becomes at once a cause of increased friction to the water passing through it, and the sharper the angle of the curve the greater the friction. This is so with a rigid tube; but in a flexible tube, in addition to the increase of friction due to the curvature, a principal, perhaps *the* principal, cause of the retardation of the stream flowing around the curve is to be found in the narrowing of the aperture of the tube at the point of flexion.

It is a well-understood axiom in physics that of all figures a circle encloses the greatest area with the smallest circumference; therefore, so long as a tube retains its circular form, the greatest possible area of circulation is allowed to the contained fluid passing through it; but when by flexion the circular form is lost, and an ellipse more or less oblate is formed, the internal area of circulation is proportionately diminished, and the current retarded. The application of this principle to the extreme flexion of the arterial trunks is obvious; their structure favours the effect described.

A series of experiments which I have recently performed with a view of testing the tension of the bloodvessels—a physiological point to which my attention was directed by the labours of Mr. Savory*—show that the arteries are naturally in a state of permanent tension, which keeps them in the position of patent circular tubes. I have repeated several times the following experiment:—A portion of an artery was exposed and accurately measured. It was then dissected out and removed, and again measured. It was then stretched to its extreme limit, and measured a third time. The first gave its length *in situ*; the second, when completely contracted; and the third, when fully extended. The results stated in the following table, although they differ somewhat in each individual case, may be accepted as substantially accurate:—

	Relaxed. Inches.	Natural. Inches.	Stretched. Inches.
Common carotid...	1	... $1\frac{2}{16}$	... $1\frac{6}{16}$
Femoral in middle of thigh	$0\frac{8}{16}$	... 1	... $1\frac{1}{16}$
Abdominal aorta	$1\frac{7}{16}$	... 2	... $2\frac{1}{16}$
Internal mammary	$1\frac{1}{16}$	... $1\frac{4}{16}$	... $1\frac{5}{16}$

If in various parts of the body the artery be divided, as for instance in the middle of either of the limbs, no position can be devised by which the retracted ends will be brought into apposition; indeed position here very little affects the degree of separation. But if the brachial artery or the popliteal artery be divided in front of their respective joints, then forcible flexion will bring the ends into contact. This fact affords interesting physiological explanation of the mode of action of forcible flexion, which accords with the observations already made in my earlier papers. Thus the complete flexion of the knee- or of the elbow-joint so impedes the flow of blood, that the pulse at the wrist or at the ankle-joint becomes under such circumstances imperceptible. Important surgical applications of this circumstance can be made, not only to the treatment of aneurism, but to the arrest of hæmorrhage, and, as I have lately proved in practice, to the treatment of erysipelatous and other inflammatory affections of the hand and foot. By an interesting natural provision many evil effects from the partial closure of the trunks of the vessels at the joint are obviated by the very free anastomosis of vessels about the elbow- and knee-joints, which has often attracted the attention of anatomists. This arrangement is particularly advantageous to the treatment of aneurism by forced flexion; for while the canal of the artery and the current of blood through it are thus narrowed at the point affected, the free arterial and venous anastomosis around the joint has the effect of averting the inconveniences of any prolonged or thorough interruption of arterial or venous circulation through the limb. Probably also the projecting bellies of the contracted muscles may cause some pressure on the artery which lies in contact with them. And in the case of an aneurismal swelling some direct pressure may be made upon the tumour. But of the occurrence of this circumstance, as of its desirability, I am doubtful. ..... It is now pretty clearly established and generally accepted that our object in treating aneurism should be, not to cut off the supply of blood, nor altogether and at once to arrest circulation in it, but to cause such a retardation of the current as will lead to the gradual deposit of fibrinous laminæ in the interior of the sac, and so effect its gradual consolidation. The former method is uncertain and dangerous; the latter is safe and permanent in its results. In the case in which I first applied the method of flexion to the treatment of popliteal aneurism, and in that in which Mr. Shaw subsequently had the goodness to test it, we were completely successful in obtaining the latter result. In a case which I treated in September, 1860, I obtained consolidation of the tumour in four days, and without confining the patient at all to bed. I have recently heard of a second case treated successfully also on the same plan, without confinement to bed. The success which has given most pleasure is that which this method has achieved in the hands of Mr. Spence, the distinguished colleague of Mr. Syme, at Edinburgh. In this case the superficial femoral artery had already been tied for popliteal aneurism, with a temporary benefit; but the aneurism relapsed, and the most favourable alternative suggested seemed to be ligature of the iliac under very disadvantageous circumstances, when forcible flexion was tried, and with success.

Not to dwell upon the details of these cases, which would occupy too much time and space here, I may say that they may be divided into two classes: the one, of cure by flexion treatment only; the other, of cure due to the conjunction of flexion with compression. This latter combination has been found very useful; and probably in every case where compression is employed flexion may be used with advantage as an adjunct.

The details of treatment I have already elsewhere discussed, and will now avoid repeating them.* I will only remark that patience and tact are needed on the part of the surgeon in this as in every other method of treating aneurism. Even then I am aware that it will not always succeed; but it will be no small reward for any amount of labour if I shall ultimately have succeeded in firmly establishing among the new resources of surgery a bloodless and simple method of treating this disease, which John Hunter first rescued from the category of the mortal failures of our art.

On Wednesday the President and Council of the College of Physicians held a *soirée* at their house in Pall-mall in honour of the members of the British Medical Association. There was a numerous gathering, but fewer gentlemen from the provinces than might have been expected. The visitors were received by Dr. Watson, the President. The refreshments were of the most sumptuous character.

THURSDAY, AUGUST 7th.

SIR CHARLES HASTINGS IN THE CHAIR.

Dr. WATERS proposed that in accordance with the recommendation of Council, the next Annual Meeting be held in Bristol, that Dr. Simmonds be appointed President Elect, and that the Committee of the Council be requested to make the necessary arrangements, and nominate the readers of the addresses.

Dr. BUDD, of Bristol, seconded the resolution, which was unanimously adopted.

THE RELIEF OF NEAR SIGHT WITHOUT SPECTACLES.

BY J. V. SOLOMON, ESQ., F.R.C.S.

The paper commenced with some remarks on the accommodation of the normal eye. It was argued, on the method of exclusion, that the ciliary muscle must be the chief factor of those changes which produce the highest state of refraction. In myopia, or near sight, the author said, the refraction of the dioptric media was too great; a condition which he reduced by performing an intraocular myotomy of the ciliary muscle. Mr. Solomon then noticed the serious structural changes which

* On the Shape of Transverse Wounds in Bloodvessels. By W. S. Savory, F.R.S. 1860.

* THE LANCET, vol. i. 1862, p. 147.

the ophthalmoscope and dissection after death prove to take place in the optic nerve, retina, choroid, sclerotica, &c. An acquaintance with these pathological phenomena, he said, explained the great uncertainty which myopic persons experience in their powers of vision, and the subjective symptoms of congestion to which they are prone; also the not unfrequent occurrence of amblyopia, and sometimes of amaurosis.

The author contended that the infrequency of non-hereditary staphyloma posticum, unattended by atrophy of the choroid pigment, favoured the opinion that the choroid, and not the sclerotica, was primarily affected in the production of elongation of the antero-posterior axis of the globe. It was evident, he remarked, from all we know of the pathology of myopia, that whatever surgical operation we may adopt for the relief of near sight must contain within it not only the power of decreasing the excess of refraction of the drioptric media, but of removing intraocular congestion, which is commonly connected with that state. Observations made at one of the most numerously attended provincial ophthalmic hospitals, and which had extended over a period of nearly two years and a half and embraced an experience of upwards of forty operations, had led the author to the conviction that the said desiderata are more completely supplied by intraocular myotomy than by any other method. Indeed he knew of no treatment, which is equally safe and easy of execution, that exerts the same amount of curative power in cases of subacute and chronic posterior choroiditis.

After describing the ciliary muscle and his method of dividing it, Mr. Solomon said the most striking results from his plan of treatment were afforded by patients under the age of puberty. The operation enabled children to see features with as much distinctness, and at the same distance, as persons whose accommodation was normal. It prevented their acquiring the habit of dropping the lids, and of that *distrait* demeanour which myopics commonly exhibit. It also enabled them to thread a needle, pick a pin from the floor, and read a book at a moderate distance from the eye. A boy of eleven years, who could see features with distinctness at six yards only, in two years after the operation saw them with clearness at forty yards, and the figure of a man and all his movements at 500. He read small pica at thirty-three inches, instead of at six, as before operation. In adults whose eyeballs are not very wide in their transverse diameters, or their optic nerve completely encircled by a wide horned staphyloma posticum, or their choroids spoiled by extensive atrophy, a normal range for features was frequently acquired. A man who two years ago could read small pica at nine inches and a half only, and see features distinctly at five yards, now reads at twenty-four inches, sees features at thirty yards, and trees with distinctness at a mile and a quarter.

The paper was illustrated by diagrams of the ciliary muscle, coloured drawings, and mathematical formulæ, illustrative of the value of the operation in the accommodation of eyes which had been treated upwards of one or two years.

A METHOD OF DETERMINING THE EFFECTS OF SYSTEMS OF TREATMENT IN CERTAIN DISEASES.

BY W. FARR, M.D., F.R.S.

To heal the sick is the office of the physician; and as there are various kinds of diseases, the treatment varies. Our means of judging of the effects of treatment also vary. In some cases these effects are obvious; in other cases they cannot be appreciated. There is a large intermediate class of cases which can be judged accurately by a method which I now beg to submit to your notice.

Our knowledge exists in different states. For instance, the knowledge of the stars which guides the mariner is in form very different from the knowledge which the astronomer has of the same objects. The husbandman knows a great deal about wheat-plants, but it does not exist in the form which the knowledge of that plant assumed in the system of Linnæus. Linnæus seized certain characters which served the purposes of his method, and the same course is pursued in all the sciences.

Medicine was, not many years ago, taught in this country somewhat in this fashion. The apprentice learned the nature of drugs by compounding them; and he became acquainted with disease by visiting the patients of his master, either at their homes or in hospitals. He distinguished diseases by their characters, precisely as the farmer distinguishes the various kinds of grain; and he followed up the plan of treatment which experience and tradition had handed down from generation to generation. The Greek schools of medicine pursued the same course.

It is a great mistake with the sceptic to suppose that he o is no certainty, and that no satisfactory judgments of the effects of treatment can be formed under this system.

The effects of taking up an artery are evident; so are the effects of some other methods of arresting hæmorrhage. The diarrhœal and choleraic discharges are also frequently stopped by medicine. Recovery from drowning is often the direct effect of Marshall Hall's Method. The relief of constipation by aperients, and of retention of urine by the catheter, are instances of the direct cure of disease by removal; so are several amputations, and the cutting away of various tumours; the extraction of teeth, tapping for hydrocele, and the operation for hernia. Pain is assuaged by opium or by chloroform; ague is cured by quinine; scurvy by lemon-juice; anæmia by iron. These are examples of the medicaments which prevent and also cure diseases. And the evidence of their therapeutical efficacy is almost as incontrovertible as the evidence of the successful reduction of dislocations, of the setting of compound fractures, of the extraction of the impacted fœtus, or of the healing of ulcers.

The effects of bloodletting in cutting short inflammation; of mercury in syphilis; of colchicum in gout, were judged in the same way, and were in past times considered equally certain. In this class of cases, in fever, in the exanthemata, in rheumatism, in consumption, and in diathetic diseases, the processes go on for many days, and a certain number of them are fatal under any system of treatment. Here, then, judgment is difficult; the opinions of the past are questioned; and although right results are, no doubt, arrived at by sagacious men, a great deal of uncertainty and diversity of opinion necessarily prevails. The utility of medicine is denied by the sceptic; the expectant does nothing; the empiric vaunts his cures; and amidst the conflicting methods of treatment the conscientious man finds it difficult to select the best.

The power of the physician of these days over the phenomena of life, and over life itself, is vast; for with diet, regimen, and the potent chemicals of the materia medica, he can act on the patient in a thousand ways. He is indeed *ἀνάκτων*. In some cases he stills disease; in others he gives life. He is the healer. But he is not allowed to assume that he cures every case he treats; or that because, with M. Bouillaud, he extracts four pounds of blood from the veins, he cures rheumatism; or that salivation to the extent of three pints daily is a specific for syphilis. Some few practitioners still believe that when they treat a patient, either in the usual way, or heroically, or homœopathically, and his recovery follows, it is the inevitable and direct result of the treatment. Quacks live, too, upon this fallacy; but it misleads no rational observer of the progress of disease.

Some method, then, of measuring the effects of systems of treatment is required; and that method—while it does not supersede intuition—is necessarily founded on induction. It is based on observation and records.

"Therapeutics," says Boerhaave,* "is that part of medical institutions which teaches us to discern in sick persons what distemper they labour under, and thence to learn what is requisite to their cure."

Therapeutics presuppose pathology. And for the purpose of our method diseases must be taken of which the correct diagnosis is possible under ordinary circumstances. The method supplies the formula for the prognosis.

The sick persons are to be saved from death, and to be restored to health. To test the efficacy of two systems of cure we have then to determine the time that the sick persons remain ill. If it is found that 100 patients healed in one way are cured in seven days, and that none die; while of 100 treated in another way—or not treated at all—illness lasts thirty-six days, and ten or twenty die, the efficacy of the treatment is placed beyond doubt. But practically the great majority of diseases—like small-pox—can only be cut short in a limited number of cases; while of the rest, some terminate in death, others terminate in recovery after several weeks of illness. The cure is really the diminution of the danger—that is, the reduction of the mortality, and the acceleration of recovery. Now, rates of mortality and the durations of illness cannot be accurately measured by the naked eye, if I may venture to use the expression. Hence the necessity of observation, of records, of instruments, and of a method to assist the mind in its determinations.

All diseases have a sort of natural life; that is, they begin, grow, attain maturity, decline, terminate. Their evolution,

* Method of Studying Physic.

like that of an animal, requires a certain term for its completion; and that differs from their actual duration—as the actual life and the mean lifetime of men fall short of the sæculum in which their physiological development goes through its round.

A small-pox patient may die before the appearance of the eruption; and an inflammation may not go on to suppuration.

The death of the patient is the death of the disease; for disease is a living process. Now, we find that the danger—which is accurately expressed by the mortality—changes in different stages of the same disease; and the chances of ultimate recovery change every day. I will proceed to describe a construction, which will enable you to measure the chances of recovery and of death, when applied to large numbers, and also to calculate the *after-sicktime*.

[The tabular construction is here described; and it is derived directly from the observed numbers dying, and recovering in each period of the disease. It shows the chances of recovery, the duration of cases, and the mortality. It gives an exact measure of disease, from the therapeutic point of view. Illustrations from a table of 8000 cases of natural small-pox.]

The diagnosis of some diseases is uncertain. But I have here a list of the diseases which might be investigated in the present state of pathology:—Small-pox, measles, scarlatina, diphtheria, croup, whooping-cough, typhus, erysipelas, metria, carbuncle, &c.

The observations for this method are made in nearly the same schedule as that employed by Hippocrates in his reports of cases. The form of disease, its point of origin, and its termination, are defined, so as to leave no doubt about the thing to be investigated.

The varieties of the disease—if they can be clearly distinguished, as in small-pox, modified and unmodified—are separately investigated. The results of treatment in hospitals, and in the homes of the poor, are ascertained.

The age and sex of patients are found to be important elements, and enter into the analysis.

Finally, the method is applied to measure the effects of systems of treatment. It is not necessary, and I think it would be impossible and wrong, to endeavour to determine the duration and mortality of diseases left to themselves. The object should be to determine these elements under the present system of treatment. Every new method could be tested by this standard.

To heal the sick is the aim of Medicine, and pathology as well as physiology are subsidiary to this grand object. The public come to you for relief, for life; and you, in the schools of this country, have ever kept that end in view. You are now here in a position to make a great step in advance; and the progress of pathology since Hunter's time, in England, in France, and in Germany, throws the field open to the therapeutist; so we shall perhaps see, by the side of the Pathological Society, a Therapeutical Society flourishing, and doing incalculable good. This branch is of such paramount importance, and so entirely within its province, that I do not despair of seeing the College of Physicians taking it in hand, and enlisting in its support every practitioner in the kingdom who has the interest of medical science at heart. You can, by a combined system of observation, determine the mortality and duration of every definite form of disease; you can, at the same time, measure disease, and the relative power of remedies in cutting it short and diminishing its dangers.

Mr. RUMSEY brought forward the following resolutions with reference to the Act for the Registration of Births, Deaths, and Disease in Ireland.

1. That in any measure of legislation for the registration of births and deaths in Ireland, this Association deems it highly important that the local machinery for such registration should be altogether distinct from that for the registration of marriages, and is happy to perceive that this principle has been recognised in the Bills introduced into the House of Commons during this and the preceding sessions of Parliament.

2. That it is most desirable to introduce into any such measure the principle of local scientific supervision of the return of births and deaths.

3. That the office of Superintendent Registrar of Births and Deaths ought to be held by persons well acquainted with physical and biological sciences, versed in sanitary and vital statistics, and accustomed to make legal investigations.

4. That it is desirable to combine with the superintendance of the registration of births and deaths the registration of all sickness attended in public institutions, or at the public expense.

5. That each Superintendant Registrar should be required to publish, for the information of the local administrative authorities and the instruction of the inhabitants of the district, an annual report of the results of jurisdiction, as also a quarterly summary of the deaths and diseases, with their causes, according to forms to be determined by the Registrar General for Ireland.

6. That in the local reports of mortality and sickness it is important to specify age and occupation, to record meteorological observations, and to note local events and circumstances affecting the public health.

7. That it is desirable to require the authentication of the cause or mode of death by a certificate from a legally qualified medical practitioner; and that where no such certificate is delivered the sub-registrar be required to inform the superintendent, who should forthwith make inquiry into the case.

8. That the registration of births should be compulsory, and that still-births after the sixth month of utero-gestation, when not certified by a legally qualified medical practitioner, should be subject to the regulations stated in the last resolution.

9. That the boundaries of registration districts and sub-districts ought as nearly as possible to conform to the limits of existing districts for the relief of the poor and for the administration of medical aid, having due regard to the jurisdictions of local sanitary authorities.

10. That the proposed scientific superintendents, as statistical inquirers and reporters for national purposes, should be made independent of local and party influences, debarred from private medical practice, and paid out of the national funds.

11. That the Council of this Association be requested to open communications with the Government and with the Poor Law Commissioners of Ireland, for the purpose of laying before them the suggestions of the Association, and of conferring with them as to the best mode of embodying them in a legislative enactment.

The Resolutions were seconded by Dr. Richardson, and unanimously adopted.

ADDRESS IN SURGERY.

BY J. PAGET, F.R.S.

Mr. President and Gentlemen,—I have chosen as the subject of my address, "The Treatment of Patients after Surgical Operations," and I venture to think that I shall best discharge my duty if I deal with this subject, not merely in retrospect, as if there were only some great achievements over which we might rejoice, but rather with the view of indicating some of the things which yet remain to be done, and which may be done if the members of this great Association will make it their chief business to do them. There is, indeed, nothing in the retrospect from which we need avert our faces; rather there are many things over which we might boast as good work achieved; and if I had to name them all, or to illustrate the chief of them by one, I would take the security and soundness of our practice, founded on a wider recognition of the principle that the recovery from an operation, as from any other injury, is so natural a process, that, except in certain exceptional cases, it should not be at any time or in any way interfered with; for we are so constructed that injuries by violence, from whatever source, do of themselves, and naturally, bring about the processes for their own amendment. We are fitted, not only for the calm of life, but for the storms of it; not only for the things which are certain, but for those which are probable; nay, almost for all that are possible as events that occur in our life; and among these probable events are injuries by violence. Among these, and not widely different from them, except in regard to some of the conditions in which patients come before us, are the injuries inflicted by surgical operations.

Nevertheless whatever be our fate in the natural process of recovery from injuries, there are certain things left for us to do or to watch, or in some respects to guide. And first of all we have to decide in every case the method by which the surgical injury shall be healed. We have long been settled in a just preference for the most speedy mode of union, that is for union by the first intention, whether there be healing by immediate union or by the union by adhesion. And there are many obvious reasons for this; but the most potent of them, to my mind, is, that so long as a wound is unhealed, there is some risk, however small, that the patient may fall into pyæmia or erysipelas, or some other of the sore plagues of surgery. But the manner of healing the wound being decided, there yet remain many things to be done, even by those that have the most full faith in the natural processes of recovery. They may, however, perhaps be summed up in comparatively very few words—namely, repose

and cleanliness. But both of these leave much still to be done. For repose there must be not only perfect quietude of the wounded part and the parts of the wound itself, but of all the circumstances that surround the patient; and for cleanliness the most complete purity of the air, the water, and everything that may come near the wound.

And repose requires much more than this. It requires the absolute non-interference, except on express occasions, of the surgeon himself. There must be no rough contacts, no searchings, no pressures, no touchings of the wound except with the softest things, and in the softest ways, such as soft streams of water. More than this will spoil many a good day of nature's work. And for cleanliness, there must be not only those things which are commonly provided, but much more—things on a larger scale—baths, either general or local baths, the frequent changing of dressings if there are to be any dressings at all, and the frequent changes, not only of bed linen, but of beds, and even in hospitals, the frequent change of wards, or places in wards, or, in private houses, frequent changes of the rooms that the patient must at each time occupy; and in all these things the surgeon has to set before himself to be done a great many things that do not lie commonly enumerated amongst the general rules for surgery. And simple as the rules may seem, they include yet many things, but I can speak of them only in very general terms. Nevertheless, the very generality of the terms may imply a largeness of the rule that may be now laid down, that for all the ordinary management of patients after operations, repose and cleanliness are the only two things that need to be observed, and this not only for the local management of the wound, but even for those things which accompany it, namely, the shock and the reaction, that are either associated with or follow after other more important operations; for deaths from mere shock are certainly very rare, and the results of reaction are, I believe, never fatal, even when it runs up into the condition of acute traumatic fever. The discomfort of a sharp reaction after a shock is perhaps too apt to make us look upon it as a kind of disease; and yet if we would judge it more truly it is really only an example of the higher and more peculiar power of organic bodies. In inorganic matter the axiom is that action and reaction are opposite and equal. In organic bodies it is not so: the reaction is always, in health, stronger than the action.

The heart, for example, if it be depressed in its action, suppose by the shock of a sudden shower of water, recovers, not the condition which it had before, but something beyond it. The spring recoils with the same force as that which depressed it; the pendulum swings equal distances this way and that; but the heart with vital force recovers to something more than the force which depressed it. So a muscle which is gradually wasted by exercise recovers not only from the waste, but to something more of power, and becomes hypertrophied. In a similar manner, after a shock, all the parts which have been depressed in their vital functions, suspended, or brought to their lowest mark, recover not merely to the normal standard in which they worked before, but to something beyond that standard; they react with more force than they had even before they were depressed. I repeat, therefore, that however much the phenomena of reaction, even in sharpest form, may simulate disease, they must be regarded and dealt with as those which are the most manifest indications of perfect and strong health; hypertrophies, as we call them—diseases that indicate only the perfection of the vital power in that, being depressed, it does not recover like an inorganic spring or pendulum, but rises to something more than the force which it exercised at some previous time. In this way, however much we may regard the forces of the natural process of recovery, and that they leave us really with comparatively very little to do in the ordinary progress of our surgical cases, yet there is enough left for us to be done in the cases that pass beyond these; for in regard even to the management of the general phenomena, questions continually arise as to what must be done to meet this or that condition. I think the distinction may be drawn safely according to the question of whether they be events that are natural to the body, and not avertable, or such as come to the body from without, or are bred in it by error from within, and which need, therefore, our more careful search. For with regard to the questions of general management, the single fact of cleanliness, if we take it in its largest sense, will shut out nearly all the mischiefs that come from without; but that cleanliness must be cleanliness of person, of air, of water, and of everything that comes near. And so with diet. On this there may be more question, at least there has been more question; and I venture to think that if all are not agreed, yet all will be soon completely agreed, for the pendulum of general opinion which swung to one extreme some thirty years ago, and very nearly swung to the opposite extreme some three or four years ago, is now setting back into the more just medium of moderation. I remember that one of the first cases I ever took, some thirty years ago, was that of a man who had the greater part of the lower jaw removed for a fibrous tumour. It was long before the days of chloroform. The cutting part of the operation occupied upwards of an hour; the patient remained on the table more than an hour and a half, and he left at the close of the operation greatly exhausted; and though he was a young and very healthy man, for the three days following the operation he received three tablespoonfuls of milk per diem, and about a pint of milk-and-water was in each day injected into the rectum. The rest of the diet for the remainder of the case was after the same scale. He recovered with remarkable quickness, and without one hindrance to his good progress; and I remember that the operator, in a clinical lecture upon the subject, said he ascribed so remarkable a recovery to the great abstinence that was used. The diet in such cases, he said, could not be too low. At the present time, perhaps, in some places, certainly in many places not long ago, the same patient would have been plied with wine or brandy, and with all manner of food; and I have little doubt that he would have recovered as well, as speedily, and as perfectly, for I have seen the same oppositions of practice carried out without mischief in the last few years.

But then, what is the reason of this apparently equal success of two opposite methods of treatment? Certainly not that they are adapted to different times or different types of disease; for I repeat that I have within my own experience the last few years seen or practised them both without damage; but that between the two there runs the natural process of recovery, which is, in health, in all persons not already tainted with great disease, so certain, that neither excess nor deficiency of diet, nor surfeit nor starvation, can always avert it. Let me not seem to be indifferent as to how a patient should be fed after surgical operation. I cite these apparently equal successes of different modes of treatment, not for the praise of either. I have no doubt that either of them, always adopted, would sometimes do great mischief; but taken together, and with the evidence afforded by cases that are left alone, they are very strong tests and very strong proofs of the sufficiency of the natural process of recovery; that if they be left only with such rules of prudence, of personal cleanliness, of sufficient, even of liberal, mixed diet, it is, for all the ordinary cases that will come within our charge, amply sufficient not only for the repair of the wound, but for the recovery from those general injuries which patients sustain by operation.

I think, therefore, we may boast—it may be we have to regret that the boast could not come sooner—we have to boast that we can now treat our patients, after operations, in a natural and reasonable way, in full reliance on that which is one of the first principles of our construction—that we are made to bear, not only the stress of all the ordinary events of life, but the stress of injuries; prepared, as I said before, not only for the calm but for the storms of life. And herein I think that surgery has made a considerable contribution to that study of the natural history of disease which is becoming one of the most pressing wants of our time. What will happen if this and that disease be left to itself, or only just so managed as the comfort of the patient, or his obvious needs may suggest? The question has been asked very often, but it is very rarely answered; and yet it must be answered before we can judge rightly of the value of any medical or surgical treatment. Till we have made our standards of what the progress of disease is if left alone, we cannot judge of our own power in controlling, or amending, or remedying it. Surgery has done this in regard to injuries. And let it not be thought that, by thus reducing the practice of surgery, in ordinary cases of operations, to the mere watching and guarding of the mischiefs that may happen, we thereby diminish the value of the profession, or degrade it. The obstetrician has not done so by giving up the meddlesome midwifery of former ages, and, certainly, that branch of our profession was never more honoured nor more useful than it is now, when it confines itself in all ordinary cases to the watching of the perfect ways of nature.

So let the surgeon stand by and watch; let him be content if he can keep out mischief—always a very difficult task. Let him be well content if he can do that which is much more difficult—control the restlessness of popular or half-informed ignorance, which would be perpetually, either in its audacity or its pride, endeavouring to amend the perfect ways of nature. Or if he be ambitious of more than this, he need not wait long, for easy as our course may seem when all runs smooth, we soon find that the whole grasp of our knowledge and the whole strain of our mental power is not more than enough to meet the difficulties of the case when anything runs counter to the common course of nature. Now let me speak of some of these, and chiefly with the view of

indicating what may be the chief subjects and the chief course of our future study of them. I mean, namely, those cases which do not proceed thus smoothly and quietly according to the common course of things, in which every patient submitted to an operation, should recover, as our common expression is, without one bad symptom. And here I must say generally, that it seems to me that what we chiefly need is a more minute and exact record of all our cases—of cases, namely, not only where the operation ends in death, but of those in which it brings in any mischief—even some of the smallest.

There has been excellent work and most laborious done in tabulating the cases of the mortalities after operations, and it has been done so well that it seems ungracious to say that it is time now we should be doing something more or something better. And yet it is certain that we do want to know now, not merely the total mortalities of any considerable operation, but in each hospital, in each private practice, in each place, and after each mode of treatment, not only the whole amount of the mortality, but the particular causes which have led to it; nor only so—the particular causes, if we can ascertain them, which have led to hindrance in the ordinary process of recovery. Now, first there are certain cases which confuse our records in that they ought never to be mixed up with the results of operations as being in any sense due to them—namely, cases of hernia, tracheotomy, and trephining; for of all these we may say the operation itself does not cause death; the only fault to be ascribed to it is that it does not always save the life.

But we have no right to reckon these as cases due to operations. Every surgeon who has performed these operations has had to regret a very large mortality from them; but mortality has not been because of anything that he has done, but because solely of the insufficiency of his means. For myself, among all the cases of this description that I have operated upon, I am not aware that I have ever lost a patient directly and truly as a consequence of the operation; yet nearly half of those upon whom I have operated for hernia have died, and more than half of those for tracheotomy, and nearly all after trephining. But all those were cases after the operation, not in consequence of it. They were vain, yet quite justifiable, attempts to save lives that, but for the operation, were only yet more certainly lost than they were lost afterwards. These cases, therefore, should not be allowed to swell our tables of mortality. They may be studied most carefully, but they must be studied as special cases where the history of the disease cannot be altogether separated from the history of the operation. And there is yet another class of cases; those, namely, in which patients after operations die of diseases that, as it were, fall casually upon them; the deaths, for example, from typhus or typhoid fever, from scarlet fever, from scurvy, and the rest; these should not properly, or without explanation, swell our tables of mortality. Only in dealing with these we need to be very honest.

Sir Astley Cooper used to tell that in going over the wards of a foreign hospital with one of its most distinguished surgeons, the surgeon told him that in his practice amputation at the shoulder-joint, which he had often performed, had never proved fatal. In the course of the same morning Sir Astley Cooper found in the dead-house the body of a man whose arm had recently been amputated by that surgeon at the shoulder-joint with the wound unhealed, and he asked the reason of it. The answer was, "He did not die of the amputation, he died of pneumonia," that is, as we should say now, he died of pyæmia, one of the symptoms of which was the pneumonia, which never would have happened to him but for the operation by which his arm was removed. We need therefore be very honest in these cases, the more honest because there is so great a temptation to be the reverse, and the fraud is so easy, to assign a death to that which looks as if it were the consequence of something falling by accident upon the patient, although that accident, but for the operation, would never have befallen him. But, setting aside these cases, let us look at those which do really belong to the history of the operation, which it is our chief business to avert; and first of all respecting deaths from shock. My impression is that they are extremely rare. I can scarcely remember to have seen one that could be fairly assigned only to the shock of an operation, and my supposition is that these become much more rare now than they were in former times, partly by the influence of anæsthetics, and partly also by the more liberal and more natural way in which we treat our patients before the operation, so that they can come to face the difficulty, not with the least but with the most strength we can give them.

Nevertheless, such cases do happen, and it would be well if we could so analyse as to be able to assign in each case which particular constituent of a shock was the cause of death; for example, the loss of blood, the great impression of alarm and terror on the mind, the influence of an anæsthetic, the great violence done and impressed, whether consciously or not, on the nervous centres, and from them reflected not upon the heart alone, but upon every organ of organic life—how does each of these contribute to the general total of a shock? Cases could be adduced where each of them alone has been fatal; but when all concur, as they do in almost every surgical operation, it may be very difficult, and may seem almost impossible, to assign to each its proper share in the general result of great danger or death from shock. Yet it is very necessary to study them as if we could decide which has contributed most largely or which has been alone sufficient, for clearly we have to deal, not with shock as a total result of an operation, but with each shock standing alone. According to its source, so must be the measure of its treatment. My impression is, that in recent times it has become too customary to regard the loss of blood as the greatest mischief done in producing the shock, and to consider too little the impression upon the nervous system, which being not consciously perceived, through the influence of anæsthetics, is apt to be overlooked.

I would indeed spare blood with all caution; but not so much from the fear of any immediate consequences, as because a large loss of blood seems to make a patient more liable to erysipelas and pyæmia, and the other subsequent mischiefs of an operation, and certainly makes him less capable of recovering from them if they do befall him. But it is still my belief that that which we have most to study in regard to the phenomena of shock are the results produced by great violence done on the nervous system, of which I observe that they are less considered in the present day only because we are not aware of them, through not being aware of the amount of suffering endured by the patient under the influence of an anæsthetic. I know no case in which the courage to do little is more necessary than in watching the patient after the shock of an operation; for great energy in treatment may certainly do great mischief. It is quite enough, from whatever source the shock may come, if we can maintain life for a time at a very low level, and if we can do this by the smallest sufficient quantity of stimulants, especially, in these cases, of brandy; for if we can do this, then time and the natural process of events work quietly for the recovery of the patient; and we may be nearly sure that if he can be so maintained then reaction will of itself, and almost necessarily, ensue; and we may believe this, notwithstanding a temporary deepening of the influence of shock, for I think, if others will watch it, as I have done, sitting by and noticing the case almost minute by minute, they will find—and it may be of some interest even in a physiological inquiry—that the recovery from shock is not a direct and continuous ascent from the deepest depression to the most complete reaction, but rather a vibrating and undulating one.

The patient is now better, and then again without interference becomes of himself worse; and as we watch it thus it is rather like the rising of waves in a flood-tide: each one is a little higher than the one that preceded it, until at last there comes the full sweep, and reaction is fully accomplished. And sure I am that a great deal too much interference takes place with shock by those who do thus even minutely watch it, in the fear that the least depression is common, and must lead to a yet lower and lower depression still. I have said, too, that the deaths from reaction are probably even less numerous than those from shock. I doubt if I have ever yet seen one of them; and I doubt very much whether genuine reaction, even if it runs up into an acute traumatic fever, needs to be in any way interfered with, or is at all prone to lead into fevers of worse or more perilous type. The larger risks are in those in which reaction is not complete. There are some patients, it will be found, who never rise into a reaction—never rise, that is, after an operation, to anything more than the natural level of health. Now, I am prepared to say that this is dangerous. I always watch them with great and scrupulous care: for there is, as every surgeon knows, a certain condition in which it may be said that the patient is too well after an operation. He has not recovered even to that discomfort which consists in full reaction.

But many of these will pass by, and may perhaps, for aught I know, illustrate the most perfect method of recovery, where only health is regained. But certainly there is peril when in some patients the reaction is too faltering, faltering more than it should, not only undulating, but each of its waves falling a little more than it rises. Again, there is great peril in reaction that is too long delayed, for certainly the more reaction is delayed the more likely it is to slope into a greater mischief; and certainly these are not cases to be left alone; in all of these reaction need be accelerated by stimulants, and brought more nearly to the time at which it should of itself and spontaneously recover. And more perilous still are the reactions that

attend hurry and confusion, with disorder, and restlessness, and delirium or convulsions, or with great expenditure of any kind of force—all these are perilous; they are cases of what has been described as action without power. They are difficult to explain physiologically; and yet I suspect most of them would be found to occur in those who have, if I may so speak, a natural instability of constitution; for in all these, as soon as the natural balance and stability of life are disturbed, there seems to ensue a rapid waste of structure, and with that a rapid and purposeless production of force.

For all these there seems to be one great remedy, namely, opium, which acts, I suppose, not merely as an anodyne, but by the singular power which it possesses of hindering waste, and thereby preventing the production of purposeless force, which is certainly the consequence of accelerated waste. Now, the reactions that I have spoken of have been general. As the shock falls directly or by reflection upon every part of the body, not on the heart alone, observe, but upon every part of the organic life; so, commonly, is the reaction general, and every part has its due of just work in it. But chiefly and especially the force, both of shock and reaction, falls upon the part which is the very seat of injury, the very sent of the operation. Or if great violence be inflicted, there may be for a time a total suspension of all nutritive processes, and the part may die; primary gangrene may ensue, or escaping this, after the suspense there may come a much more than normal reaction, a much more than normal exercise of organic force, an acute inflammation; nevertheless, this acute inflammation is never, so far as I have seen in any of the external parts, the consequence of more than local mischief.

We see, for example, after an amputation, or an operation on the face, that great and active inflammation ensues, but it does no other than a local harm. It may spoil the healing of a wound; it may give rise to a recurrent hæmorrhage; it may produce too great suppuration; it may even produce a primary local gangrene; but with this it stops, and never, so far as I have seen, leads to death, or to any more than a local calamity. But sometimes when the operation has been performed upon parts of great extent or of great importance to life, this local reaction, which may be observed completely independent of the general one, may be fatal. Thus, for example, patients die rapidly sometimes after ovariotomy, of a suddenly fast-setting-in peritonitis; and this, although the phenomena of a general reaction may have been clearly established; and it is to be observed that they die as patients die with peritonitis after perforation, or as they die sometimes with rupture of the intestines; they die as if with shock, with a sudden setting-in of extensive and acute disease. Deaths of this kind are growing more rare still than they used to be, for I think we know better now how to treat them. Deaths of the same kind used to occur more often than they do now from lithotomy; patients died then within one or two or three days after the operation, from some sweeping inflammation of the peritoneum or pelvic cellular tissue; and I think they died more commonly then than they do now, when they were treated with bleeding or with other antiphlogistic treatment; for the things to be met are not merely the phenomena of acute inflammation, but the shock which the setting in of such inflammation produces, or, if I may so speak, reproduces. Before they have recovered from one there comes in another shock, and that shock proves fatal. The treatment for them should be, not by bleeding, but stimulants. Although these cases may have about them even the signs of an acute peritonitis, stimulants and opium must be given till the shock is completely gone by. Now these cases of which I have spoken—and I might mention some more, especially those of primary and recurrent hæmorrhage, as sources of danger or of death—these all might, in the more accurate and minute records to which I wish to move the Society, form a group as it were by themselves, for they all are the results of mischiefs which are, so to speak, the more or less of natural things—of things which we cannot altogether avert; and with these I would class one which comes sometimes in one group and sometimes in another, namely, the use of chloroform. I could not find terms strong enough to speak of the value of anæsthetics for surgical operations; and let me say, not only for their mercy's sake, not only for the saving of pain, but for the abundant good that follows afterwards—the loss of that impression with which patients awake every morning from a disturbed night's sleep, the loss of the reflection and memory of the operation, the great diminution of all that shock that was dependent upon absolute pain, whether the pain were reflected from the nervous system or not.

All these things are so great blessings that one seems to be ashamed to detract in the least measure from the influence of anæsthetics, and yet I must mention one. I have said that great energy of treatment may be a great mischief in the treatment of a shock after an operation. I mean that it is so if after the profuse giving of stimulants or of food of any kind sickness be produced; for amongst all things which can complicate the depression of a shock vomiting seems to be the worst, and unquestionably this will sometimes follow the influence of anæsthetics, and when it does follow, I know nothing except time by which it can be averted. I know it can be prevented commonly by giving the patient only the most light and digestible food, some two or three hours after the administration of the anæsthetic, and by great care over the digestive organs. But notwithstanding these, it will sometimes happen, and it complicates with great severity the occurrence of a shock; for when it begins, so far as I know, medicine has no control whatever over what we call chloroform sickness. I know nothing that will stop it.

It will stop in time; after a few hours in some; after a few days in others. It is of no mischief to all the cases of minor shock; but for all the larger ones it is, unquestionably, a great addition to the peril, and I cannot doubt that it has sometimes been a fatal one. It deserves, therefore, the most careful study of all the members of the Association, and of all that can contribute to its remedy. But when I say this, let me also say that this is the only mischief that I know of it. There are never wanting those who will ascribe to anæsthetics certain deaths which ensue after operations in which the shock inflicted has been comparatively small. Patients have submitted to minor operations, and in a few hours they had been in great peril, and in a day they have died; and it seems to be forgotten entirely that cases of this kind not only occurred, but were, as I believe, much more frequent, before the introduction of anæsthetics. There is an admirable work, which is familiar, I am sure, to all the older members of the Association—Mr. Travers on "Constitutional Irritation;" and there they will find abundant instances of this—where patients, after comparatively the most trivial operations, have died, as we must believe, under the influences of shock; the only singularity of their case was that the cause was apparently so trivial; but if those cases be referred to, it will be evident that the influence of anæsthetics is excellent in preventing deaths such as these by diminishing what in all probability was the chief cause of shock here—namely, the great mental alarm, pain, and dread of the consequences of the operation.

Now let me pass to another set of cases, which come in larger number, as the results of operations, and which are different from all that I have spoken of hitherto, in that they are not strictly to be called inevitable; they are not in any sense the more or less of the necessary consequences of the operation; rather, they come from those things which, it seems to us, if we can be bold enough to cast our eyes forward, it is not only our plain duty, but within our ability to avert,—those, namely, I mean, which partake more of the characters of diseases, and which we may believe are severally due to specific morbid alterations in the blood, whether due to mischiefs coming to the patient from without, or to those that are bred within him by the natural results of the operation. It seems to me very important that we should be quite clear in recognising all these cases of erysipelas, of pyæmia, of phlebitis, or nearly all of them, of secondary gangrene, of tetanus, and the rest, as really and from their beginning, constitutional; as general, that is, before they are local; for if we might do so, then we might study them by the light of those which are the very types of these diseases, these acute morbid affections of the blood, namely, eruptive fevers, and study them by the light not only of their pathology, but by that which we have already learned to do in their management or their treatment. It is quite true that erysipelas or phlebitis is most apt to appear at the seat of the operation, and to look, therefore, like a disease of purely local origin, but the same will happen with the truest eruptive fevers.

Some few years ago I cut a boy for the stone; three days afterwards he seemed to be in great peril of his life, with general disturbance of his system; the day after there appeared a brilliant red eruption at the wound. That was measles—earliest, most intense, at the seat of injury, and thence it spread over the whole body, and passed by without doing damage. I have known the same case occur with scarlet fever after an injury to the knee joint. Dr. William Budd has recorded a similar case of small-pox after a bruise upon the nates. So that really this local occurrence of erysipelas or other diseases at the seat of operation is no more proof of their true local origin than in these cases. Measles was not proved to have a local origin because it occurred first and most intensely at the wound of lithotomy. And there is another character, one which seems to me very important in relation to the diagnosis between these diseases that are of true traumatic origin and purely local, and those which, although they occur at the seat of injury, are yet truly specific and of

blood origin—namely, the difference of time at which the local inflammation will, in the several cases, set in.

A true local and traumatic inflammation comes in either before or very little after the time of general reaction; so that within one or two days, usually, we find it at the wound, or it may be later—three or four, or in some cases even five days, when the general reaction has been long delayed. The later it is the worse. On the other side, that which is a specific blood-disease comes in after the reaction, and commonly even with considerable interval of time between the two. Thus, for example, we may find not unfrequently after an operation on the face, where these phenomena are best shown, or after amputation, the next day, or two days later, the parts around the wound may be swollen, œdematous, painful and ruddy, the seats of active inflammation. But this is not erysipelas, nor a disease of any great moment, nor one that will tend to more than local troubles. I have never seen a case of that kind which required any active treatment. But after it is passed, if it has ever occurred, and it may be even many days later, there may set in another inflammation, looking, it may be, very like it, with similar swelling, redness, tension, and pain, but the later inflammation is sure to be one of erysipelatous or pyæmial origin, or in some other form specific. So, too, with phlebitis. On the day after the amputation the femoral vein, for example, may be sharply inflamed, tender, and painful, and with some constitutional disturbance; but this is never a disease of great moment; it passes by without treatment. But in that respect it is very different from the phlebitis which may ensue a number of days later, and which is quite surely pyæmial, or connected with some grave affection of the blood. I know, therefore, in these respects, nothing more important than studying the very time at which these inflammations set in. If they be early and only traumatic, they pass by without damage; if they be late, whatever the result, they must be regarded minutely as causes of general pyæmial or erysipelatous origin, indicating something wrong about the patient or within him—something to be amended.

There is yet another character, namely, that inflammations, of however acute a kind, which are traumatic, are very seldom preceded by any appropriate constitutional disturbance. It is remarkable that it should not be, but we never see them thus preceded. On the other side, those that are of general or blood-origin very rarely ensue without rigors, or some profound affection of the nervous system. In speaking of rigors, if I may diverge so far, I wish I could provoke some one to the more minute study of them, to see what their true physiology is. What is the meaning of that strange shuddering which we see as the precursor of some of the most formidable diseases that we have to deal with? so strange as it is, too, in its relation to the urinary organs, so often the precursor of great mischiefs; so strange in its relations to an accumulation of pus that cannot be discharged. I fear that we are as yet almost wholly ignorant of its physiology; but I would suggest—and let it be my contribution to the study I should like to incite some one to—that we are too much in the habit of thinking that its most important indication is in the sensation of cold which most patients endure with it. Yet this is really only a sensation; and, moreover, only a speculative one; for it is certain that, even before the rigor ensues, the temperature of the surface of the body is increasing, and that it continues to increase during the whole course of the rigor. I would suggest that they should be studied rather in relation to convulsive diseases; and my reason is, that they not only in a thorough rigor have all the essential characters of convulsion, but may also, as surgery sometimes unhappily shows, be replaced by convulsions.

Three years ago I operated on a gentleman for stone. Two or three days after the operation he had a terrible rigor, and that was followed by great heat, producing sweatings, and then by extensive suppuration over the surface of the chest. A few days later, another rigor ensued with similar phenomena subsequent to it, and with other characters of pyæmia, and with a second great suppuration. Some days later than that he had a severe epileptic seizure, and that was followed in the same way with a profuse suppuration, again in another part of the walls of his chest, and then with various signs of phlebitis he gradually recovered.

Not long ago a woman was under my care in St. Bartholomew's Hospital with relapsing erysipelas. All the previous attacks of erysipelas were preceded with definite rigors. A rigor regularly told of the coming relapse of erysipelas, but the last attack was preceded by severe convulsions, and they were followed by three days' coma, and the coma was not relieved until the erysipelas appeared. For the rest of her life she had no further cerebral symptoms, and after her death we found no indication of disease in the brain. She had died only exhausted.

This case has been told me. A member of our profession had chronic pyæmia; in all the earlier part of his illness each suppuration characteristic of it was preceded by a rigor; in the latter part tetanic convulsions preceded each suppuration. I could mention, I think, other instances in which convulsions do thus replace and substitute the ordinary phenomena of a rigor. I imagine, indeed, that those that are familiar to many members of the Association, convulsions that precede eruptive fevers in children, are of the same kind. But this must suffice for the suggestion I have made, and I am diverging too far from the subject that I began with, which was, namely, to indicate by those precursory constitutional symptoms the necessity of distinguishing clearly between those inflammations that are truly local and those that are pyæmial or of erysipelatic origin, and by that to tell what seems to be a greater need, that we should study all these diseases by the light of the true eruptive fevers; I mean, namely, all cases of erysipelas, of pyæmia, of secondary gangrene, of secondary phlebitis, and even, I would add, of tetanus, and all others that we have to class together as the great source of our mortalities after operation.

But the mere enumeration of these cases must be sufficient to tell that I cannot speak of them all now; only let me take the liberty of mentioning one or two things that have been most upon my mind, as most worthy to be told to those that have a large and widely-extended practice, and who might, with their contributions, bring in such a mass of evidence upon the point as has never yet been accumulated. First of all, in regard to the causes of these things. We know very well that among the general external causes for all these mischiefs, there are the crowding of patients into too limited a space, that is, into spaces where they have too limited a supply of air, uncleanliness—in a word, if I might sum it up quickly—dirt of all kinds, within or without; and for internal conditions, we know very well that those patients are most prone to them who are, as we may believe, most unstable in their composition—namely, those whose tissues are disordered, either by defective food, or by intemperance, or by excess of animal food, or those who retain in their frames too large a quantity of refuse—matter not sufficiently excreted—as the gouty, and above all, those that suffer with granular degeneration of the kidneys. We know well enough that in any one of these the ordinary consequences of a surgical operation are sufficient to bring in that morbid condition of the blood which manifests itself in erysipelas, pyæmia, gangrene, or some other source of fatality. But my impression is, that there are yet some other causes to be sought for; for where even we may believe that all these are absent, yet these plagues come in. For example, I do not know that we can assign any one of these diseases to be a product solely of hospital practice. I must say for myself that I have never seen one of them more intense or more fatal than I had seen it in single cases amongst the best and most well-ordered houses of the metropolis; certainly not one that I could mention which has been worse in St. Bartholomew's Hospital, than I have seen it in a house, in a room, and under a charge with which I could find no distinct fault. It may be said that in hospitals we can never altogether exclude the sources of foulness and infection. I am not prepared to say, I am only prepared to doubt, whether they may not exist also even in our best houses; whether our sanitary arrangements are anywhere so perfect as to shut out the sources of even the worst form of zymotic disease.

I can only suspect that there are yet some things hidden. I cannot yet profess myself prepared to believe that there is no one of us living in such conditions of external health, but that after an operation there is that lying at his bedside which will breed some dire calamity to him. But I would suggest here—not only to hospital practitioners, upon whom, most unjustly, as it seems to me, the whole burden of proof of these cases has been hitherto cast, but to those who practise also in private—that in every case where any one of these diseases occurs, I would most conscientiously try, and that we should look for its source to the hospital or the private house, or the practice should be brought to a strict trial—a private trial, if you will—but a just and a true trial before our conscience; and if the hospital or the house or the practice be found faulty, let it be condemned and be at once amended. Another point I would suggest is, that it is not enough for us to study these things only in their worst forms, in those in which they are deadly, for we can never know the true extent of a mischief if we know none but those whom it kills. If a patient barely escapes with his life, or even in the process after an operation he passes through any peril, even of the least, he may indicate as great a necessity for amendment of the conditions in which he has been placed, as if he had died. This is true of erysipelas; and there is a thing to be considered, that, seeing how vast are the differences between the worst and

best cases, it may be quite within our power to reduce the whole of the cases that do occur to the condition of the lowest peril.

But much more, it seems to me, is this the case with pyæmia, or rather with the group of diseases which we have to include under the most inappropriate of all terms, a term not only insufficient, but altogether false; for the one thing there is not in pyæmia is pus in the blood. Look only at the number of cases that are included in this disease, and the number which altogether elude not our observation but our record. There are, first, cases of acute pyæmia, well marked by rigors, by profuse sweatings, by rapid exhaustion, by articular suppurations, by pneumonia, deposits of pus here or there, and rapidly fatal. These are the cases that swell up our records of mortality; but there are others which ought to be recorded and studied with equal care, namely, the chronic, where the same series of phenomena ensue, occupying only a longer time for their occurrence; and again there are yet others as truly pyæmial, those which are seldom recorded at all, namely, those in which there are but threatenings of these conditions. Patients that have repeated rigors, slight pains about the joints, and abscess at some distant interval of time, pass through their course with that which looks scarcely like peril, and yet it may be the very same disease which, overlooked in the hospital, may cause the deaths of all patients that next come under operation; and again, there are yet others, cases that after an operation pass on with one abscess after another. All are familiar with these, but they are not reckoned commonly as pyæmial. The whole history of their occurrence, and the most accurate comparison of them with others of the same acute type, shows their identity, and there are yet others, where patients after operations are attacked with inflammation, first in one vein and then in another, then with induration of the subcutaneous cellular tissue, then with a small deposit of pus that is soon discharged and healed up. These again are cases that we need minute record of, that in all hospital practice should be recorded, in regard to the grave question whether these might be avoided, for I venture to say, if we can avoid these more local manifestations of the poison, so surely we can avoid the more principal ones.

I have said that one advantage of studying these cases by the light which we have from those that are the express and typical examples of blood disease of the acute form, is that you have to treat them after the same method as we now deal with the eruptive fevers. I know, indeed, that with regard to these our medical power can scarcely be spoken of as in any strict sense curative—we manage them.

I wish surgeons could manage pyæmia as well as physicians and general practitioners can manage scarlet fever or eruptive fevers that they have to deal with; but still even they do manage more than cure them. And yet let me suggest that there is great hope that we may discover absolute specifics for these things, when we see that some cases or some symptoms may be cured with apparently a true specific power; for example, the recovery of certain patients from erysipelas under the influence of large doses of iron, so definite, that one must surely speak of it as a true specific for the disease in those cases. No one, I think has been more disappointed than myself in the endeavour to make iron useful in all cases; but no one can be more convinced that there are certain cases in which iron is a direct and distinct cure for erysipelas. Quinine has in some case sa power of the same kind. It cures, as Dr. Latham says, outright, and in the strictest sense. And having occasion to mention that honoured name, let me congratulate the members of the Association on the rich treasury of knowledge which he has lately contributed to the profession—knowledge which shows him so old in experience, so fresh in intellect, so strong, as he has always been, both in the power of thinking and in the art of telling others what he thinks.

And there is another remedy of this kind. Quinine in large doses will cure the rigors of an acute pyæmia almost as certainly and as swiftly as it will cure ague; and curing these by what seems to me a distinct and specific power, it will sometimes help materially to the final recovery. But I cannot profess that I have seen it do more than thus help; and if I look back to the records of the many trials and many disappointments I have endured, I think there is but one thing that I have ever seen have such as I should call fair remedial power over pyæmia: that is, a profusion of fresh air. The most remarkable recoveries from pyæmia—they are three—that I have seen, were those in which the patients may be said to have lain day and night in the wind. They lay with the wind blowing all round about them through the room. They so lay, that I have said that I wished they could hang our patients in beds outside of the hospital, rather than within the walls. But it is time I should have done; and though out of the abundance of my ignorance I could go on for a length of time, telling of things that I think require our most careful study, let me only end by impressing on you some of the great motives that we have to make this the chief subject of our study: I mean the means by which we may reduce the mortality after our surgical operations.

I need not dwell upon our selfish interest in the matter; I need not speak of the disappointments and deep regrets that we should save ourselves, if we could only, by some measure, reduce the mortalities of these things; but rather, see that the whole course of surgery of late years has been such as to render the performance of surgical operations more and more feasible, if only we could greatly reduce their mortality. They can be done without pain. The after-treatment may be now conducted with so little pain, that I should count it as a matter of mismanagement if, in any ordinary cases, a patient complained at all after the first or second day.

The rules for operations are every year improving; the education of students in them is every year advancing; constantly our mechanical appliances are improving and drawing more near to perfection; and witnessing the cases of ovariotomy and resections of joints and others, we may safely say every year adds to the number of those things that should be done to save life. Yet over all this, which might be so brought, there hangs a cloud—as it were, a dark pall.

We cannot do these things without risk, and often without too great risk to life. Our risks in amputation are counted by the mortalities of from fifteen to fifty per cent.; after amputations of the breast, from five to ten per cent; after lithotomy in the adult, twenty, forty, or fifty per cent.; and even after minor operations the mortality ranges in every one's practice, I suspect, to two, or three, or sometimes even more than that per cent.; and it is because of these things that we are driven sometimes to tedious and painful substitutes—to caustics, to the écraseur, and lithotrity; and we learn from abroad of tolerated barbarisms, of practices which might lead us to think that the whole art of dexterous surgery was lost. We learn of limbs amputated and of eyes extracted by caustics—of limbs wrenched off, after crushing of bones and crushing through their flesh; and this is justified in the minds of the surgeons—for they are surgeons by whom these things are done—on the plea that a cutting operation is of so great risk that there is no substitute too bad for it.

To amend this is the task that we have before us; and with what heart may we go to the work? Why, surely, with very good heart, if we see what is done in some places and under the best care, and contrast the results of the best circumstances with those of the worst. Let me cite only three cases. A very distinguished member of our Association, Mr. Hussey, records from Radcliffe Infirmary, Oxford, that the total mortality after amputation is only thirteen per cent., and the mortality in the Parisian hospitals is upwards of fifty per cent.; and he states that of fifty cases of amputation performed in that same infirmary below the knee there was but one death. Mr. James records from the Exeter Hospital that the total mortality of all amputations is only fourteen per cent., and amputations after disease have a mortality of less than nine per cent. So Dr. Humphry, again, records from a hospital in Cambridge, that the total mortality of amputations, of the lower extremities, observe, is only sixteen per cent.—a mortality which rises in the Parisian hospitals, which are far from being the worst in Europe, to upwards of sixty per cent.

These are the things that have been achieved, and these are the things which it is the express duty of every hospital and private surgeon to see that he achieves in his own practice; for we should go to the study of these things with the consciousness that a great part of the deaths that still remain are not inevitable; that by more care and scrupulous attention, not perhaps in our own practice on the very patient himself, but in all that surrounds him, these mortalities might be reduced. Even in Paris, within the last twenty years, the mortalities from great operations have been reduced by at least ten per cent.

Now so much, and much more than that, must be done in England; and so much, and much more than that, will be done, if the members of this Association will say that it shall be done, and will act vigorously on the decision.

Mr. HAY proposed "That the cordial thanks of the meeting be given to Mr. Paget for his very able and interesting address, and that he should be requested to allow it to be printed in the Journal of the Association."

Mr. HODGSON seconded the Resolution, which was put to the Meeting and unanimously adopted.

The CHAIRMAN then read a letter from Dr. William Ogle, proposing the following resolution, "That a Divine service held at the commencement of the anniversary meetings of an association for the advancement of science involves a principle which

is sound and most important, and that this meeting cordially assents to the proposal that the British Medical Association shall act upon this principle at its future meetings;" also a letter from Dr. Hodgkin, recommending for consideration the subject of the weights and measures to be used in medicines.

Discussion on those subjects was deferred till the following day.

ON THE OCCURRENCE (HITHERTO UNNOTICED) OF MALIGNANT PUSTULE IN ENGLAND.

ILLUSTRATED BY A DRAWING AND BY NUMEROUS FATAL CASES.

BY WILLIAM BUDD, M.D., CLIFTON,
HONORARY AND CONSULTING PHYSICIAN TO THE BRISTOL ROYAL INFIRMARY.

In France, Germany, and other parts of the Continent, under the significant name of Malignant Pustule, a disease has long been familiarly known and described which proves fatal every year to a large number of persons. Beginning as a minute vesicle, which is seated *always on some uncovered part*, its special character is to excite a peculiar form of gangrenous inflammation, which, spreading rapidly from the point first affected to the neighbouring tissues, gives rise to local changes of very uncommon aspect, and finally destroys life by general infection.

A disease calculated by so much that is striking to arrest attention has naturally been made an object of inquiry by many eminent observers. A long list of German, French, and Italian writers might be cited, each of whom has added something to its history. The following important points appear to be established by their investigations:—

1. That the malignant pustule in man is identical with and derived from the fatal and eminently contagious disease which, under the name of "charbon," or (in sheep) "sang," has prevailed from time immemorial on the Continent in oxen, sheep, horses, and other animals.

2. That the disease may be communicated to man from the animal in the following ways:—

a. By direct inoculation, as in the case of butchers, herdsmen, drovers, and others, in whom accidental inoculation with the malady appears to be an event of not unfrequent occurrence in the countries in which "charbon" most prevails.

b. By means of the skin or simply the tainted hair of diseased beasts—modes of communication of which many decisive examples are on record.

c. By eating the flesh of animals killed while affected with "charbon."

d. And, lastly, by the bite of insects which have been in contact with the bodies or carcases of diseased cattle—a mode of inoculation obviously difficult to demonstrate, but in proof of which numerous cases, and some apparently entirely free from ambiguity, have been recorded.

3. That the malignant pustule, when contracted by man, may be communicated by contagion to other men, or back to the animal by inoculation.

In whatever way the disease may have been contracted, it is at the outset local only, the general poisoning which ensues being due to the after-diffusion of the morbid changes and products engendered in the part first affected.

From this summary it appears that this remarkable affection has not only been closely studied by a great number of Continental physicians, but that their published observations upon it amount to a considerable body of medical literature. This being the case, it is certainly a very curious fact, whatever the explanation, that the profession in England are almost entirely silent on the subject. Mr. Druitt, in his "Vade-Mecum," and Dr. Copland, in his "Medical Dictionary," are, as far as the author has been able to ascertain, the only English writers who have treated of it at all. Both speak of it as being all but unknown in England, and both, professedly, derive their account of it from the French. In the long list of writers on malignant pustule appended by Dr. Copland and by Virchow to their respective articles on the subject, no English name appears.

From this one of two things is clear, either that a malady which is unlike any other, and which, in all respects, is one of the most remarkable to which man is liable, has hitherto escaped recognition here, or that the malignant pustule (except, perhaps, as a thing of extremest rarity) is never met with in England. This last alternative, if true, would be very difficult to explain, inasmuch as the "epizootic" from which malignant pustule is derived, so far from being unknown here, has from a very remote period caused every year a large mortality in the live stock of the English farmer. The "joint murrain," "black quarter," or "quarter evil," and "the blood," (the name by which the malady is known in the sheep,) are the same disease as the "charbon" or "sang" of the French, and the "milzbrand" of the German writers. That a disease which is known to be communicable to man should abound here, and yet never be communicated to him, would be a strange, if not an unaccountable thing.

It was one of the objects of this paper to show that the fact is not so, and that the true reason why the disease in question has not been noticed by English writers, is that it has hitherto been confounded with other maladies which offered some points of analogy with it.

In proof of his position Dr. Budd related nine cases of malignant pustule, in which all the most striking characteristics of the disease were present in the highest degree. Of these nine cases, three were under his own care; the notes of the remaining six were furnished to him by personal friends.

In all the cases which were watched from their commencement, the disease first showed itself as a small red pimple, attended by severe itching, or by a hot stinging sensation, which was described as very peculiar. In this stage it resembled the bite of a gnat, to which it was likened in more than one instance; and in two of the number it seemed to be the actual result of the bite of that insect.

In the course of a few hours the pimple was seen to be surmounted by a minute vesicle, containing a little reddish-yellow serum. These first appearances were soon followed by more characteristic changes. The first in order was a blackening and hardening of the immediately surrounding and subjacent tissues, which, rapidly extending itself, ended by invading a large area. This process was attended by wide-spread swelling and infiltration of the neighbouring parts, which put on the aspect of malignant erysipelas. In several cases, chains of inflamed lymphatics were seen passing from the seat of the disease over the forehead and down the neck. In one, severe double pleurisy occurred as a result of the general infection.

In all, there was everything to show that at its onset the malady was purely local. At first, there was an entire absence of constitutional disorder, and several of the patients were well enough to follow their usual occupations for two or three days after the first appearance of the characteristic vesicle. When the general symptoms set in, they were chiefly marked by great and rapidly-growing prostration, by frequent pulse, hurried breathing, and other well-known signs of septic poisoning. All terminated fatally, death occurring within a period ranging from the fourth to the eighth day.

When the disease began in the lip—which was the case in the great majority—the enormous prominence of the mouth, its hard and rigid state, and its almost black colour, caused a peculiar and hideous disfigurement, which was in the highest degree characteristic.

In all the cases that were narrowly watched from the first, a second crop of vesicles made its appearance as the disease advanced in the immediate neighbourhood of the first. In the patients that fell under Dr. Budd's own care, the breath exhaled a peculiar and most repulsive odour.

Taken in their whole succession, the phenomena here recounted are diagnostic of malignant pustule, and are met with in no other malady. They are identical in every minute particular with the phenomena which have been recorded in numberless instances in which the disease has been contracted by accidental but direct inoculation from animals affected with "charbon." In their fatality as well as in every other character they are also identical with the phenomena which this last-named malady exhibits in the beast.

In addition to the foregoing, the author had obtained some particulars of no fewer than fifteen other cases which have occurred within a few years in various parts of England, making twenty-four in all. In two of the twenty-four the affection was seated in the hand; in the rest it occurred in the face, and generally on the lip or in the immediate neighbourhood of it. In all, therefore, it made its appearance *on parts that are habitually uncovered*: a circumstance on the importance of which the French and Germans very rightly insist as significant of inoculation from without. In two of the series the pustule appeared to result from the bite of a gnat. In another it was caused by contact with the carcase of a sheep that lay dead in a field. The subjects of three other cases were persons whose occupations brought them into daily contact with a large number of sheep and bullocks. With these exceptions, nothing was made out in the history of the cases to give any clue to the origin of the disorder. As by the greater number of the observers its possible derivation from diseased animals was never once thought of, no inquiries were made of a nature to throw light on the subject.

In the absence of direct information, Dr. Budd suggests two different ways in which the poison might possibly be received: first, by eating the flesh of animals that have died of quarter evil or blood; and secondly, by the intervention of flies that have previously been in contact with animals affected with these diseases. As to the first mode, all that can be said is that the material conditions for it are not wanting among us. It appears to be only too certain that the flesh of animals which have died of quarter evil is largely sold in the English markets; and Dr. Budd has ascertained by experiments, which will form the subject of a separate paper, that the temperature to which meat is subjected in the operations of roasting and baking does not impair the powers of animal poisons. On grounds, however, which are fully detailed in the paper, the author inclines to the supposition that the virus is in the greater number of instances conveyed by flies.

On the subject of treatment he has nothing of his own to offer. By the experience of the French and Germans, the all-important fact seems to be established, that the disease, inevitably fatal as it is when left to itself, may be certainly arrested in its early stage by the use of powerful escharotics.

The paper concludes with some remarks on the subject of prevention, and on the desirability of a more systematic study of the diseases of our domestic animals.

The appearance of malignant pustule as it occurs in the lip was illustrated by a drawing from one of the cases.

SOME REMARKS UPON REMEDIES, AND ON THE STUDY OF THEIR ACTIONS.

BY CHAS. HANDFIELD JONES, M.B., F.R.C.P. LOND.,
PHYSICIAN TO ST. MARY'S HOSPITAL.

The subject on which I have undertaken to address you is so large, and the time allotted me is so brief, that I must dispense with all preamble and all ornamentation, and endeavour to interest you solely by the bare importance and worth of the topic.

It is, indeed, a poor truism that to cure or prevent disease is the great function of the medical practitioner; and though it be such, must we not acknowledge that this great aim has not been held so distinctly and steadily in view as it deserves? Refinements in diagnosis and in description of symptoms have too often turned away able minds from the great business of labouring to increase our mastery over the morbid actions with which we have daily to contend. It is well to describe clearly and accurately the phenomena which characterize a disease, or to distinguish between forms of disorder that have been previously confounded. But he has surely better earned his civic crown who has made known a new remedy, or a new and improved application of an old one; who has imparted some increased efficiency to the means we possess of staying the sad ravages of disease, soothing agony, and preserving life. How pleasant would be the consciousness at the close of our career that we had been enabled to increase, in some measure, the beneficent power of our art in favour of suffering humanity! It is true this high privilege is accorded to few; but may it not be that in proportion as our endeavours are set more earnestly in this direction so will be our success? "Seek, and ye shall find," is a word which we may, without irreverent presumption, take for our encouragement in this as in the highest lore.

We may be sure, I think, that remedies for disease were primarily bestowed, like most other good gifts of a beneficent Providence, on those whom, in their helplessness and need, were seeking after them. Some poor sufferer found relief from the means he employed, and told it to others, or recorded it in a votive tablet; and accumulated observations of this kind laid the first rude foundations of the science of Medicine. Long before correct ideas existed of the structure and functions of the human body, and of the various ways in which these are deranged in disease, remedies were used with a measure of success; but it never was intended that the rudimentary knowledge thus bestowed was not to be cultivated and developed, but that, as in all other cases, the talent given was to be improved that yet more might be added. You know by what hard work, by what slow and painful steps, anatomical knowledge, and physiological, and pathological attained their present goodly stature. If, as we must confess, therapeutical lags behind; if it is far too much now what it was necessarily at the outset—viz., mere empiricism, is the cause far to seek? Is it not a truth that we have not striven to improve our knowledge of the means to heal as earnestly as we have to comprehend and classify disease? Must we not acknowledge with something of shame that there are many grave questions of practice as yet undecided, and that we have never set ourselves *unitedly* to ascertain what empirical proceedings are best in certain cases? Not only have we not rational knowledge of *why* we act so and so, but we are not agreed that *what* we do is right.

Now this being so, I want to employ your time for a few minutes in thinking with me whether we cannot do something in the way of good and worthy effort to obtain a better status. It does seem to me that if anything effectual is to be done in this direction it must be by combined action, and such combined action may surely be looked for from our Association. Look at the names on our muster-roll, and let anyone say if we have not a goodly number of men who have well proved their capacity for scientific and clinical research. Assuredly we have the workers, and as certainly we have the materials. Our members are widely dispersed all over the kingdom, in various and greatly differing fields of labour: some in large towns, some in rural districts; some in the cold bracing north, some in the more relaxing south, and some even in far-off foreign lands. Who, I ask, have better opportunities than we, numbering in our ranks, as we do, hospital physicians and surgeons, experienced self-relying rural practitioners, exact observers of vital phenomena, accurate chemical analysts, and practised experimental inquirers? Ought we not to do good work? I am told that nothing ever has been done in medicine by combined efforts; that attempts of this kind always result in failure; that you cannot get men to work together, &c. &c. I hear it all incredulously, and shall still do so as long as I see all around me such proofs of what is continually effected by the conjunction of the powers and means of many. The law of successful enterprise for man is co-operation, and there can be no sufficient reason that this should not hold true in scientific research as well as in industrial pursuits.

Let us come up a little closer now to the matter in hand. Two things, it seems to me, call for our efforts; and both are, I trust, sufficiently feasible. One is to ascertain, by continued, careful, patient observation, carried on for a length of time and over as wide an extent as possible, the best methods of dealing with various diseases. This is the perfecting of our mere empirical knowledge, and requires no special scientific training on the part of the observers. All that is requisite is that they should have unbiassed, truth-loving minds, and should take care to record none but clear, plain facts, and such results of their experience as have been verified repeatedly. The second comprehends elaborate inquiries into the mode of action of remedies, conducted by able chemists and physiologists; from which we may hope to learn the way in which these agents affect the various organs and vital processes, and how they come to be of efficacy in controlling morbid action. This knowledge is a step beyond empirical: it conducts us to rational therapeutics, and gives us a confidence in and a mastery over our weapons which the mere empirical practitioner can never have.

I will now proceed to give some examples of the kind of work I want to have done. Practitioners all over Great Britain have to deal with croup, cynanche trachealis—a well-marked disease. Let them take care not to confound the true inflammatory disorder with the imitative nervous affection (laryngismus stridulus), or the asthenic diphtheritic malady. Let them record for a series of years the cases they meet with, and the treatment which has been successful, or the reverse. At the end of a period (say five years) let the results be communicated to appointed secretaries, for arrangement, comparison, and publication in a suitable form. Many other diseases, appearing in distinct and easily recognised forms, might be dealt with similarly. The records should be very brief, merely noticing the important points. I might sketch one or two as follows:—A. B——, female, aged three, a robust child, attacked with symptoms of croup on the 10th of February. Leeches applied to the throat next day, and potassio-tartrate of antimony in quarter-grain doses every two hours given for two days, then less frequently. Convalescent on the sixth day. Health subsequently good.—C. D——, aged eight months, a weakly child, attacked with rheumatic fever on May 7th. Pericarditis detected May 12th. Treated by salines and colchicum, with mercurials to slight salivation. Disease unchecked. Left side pleuritic on 16th. Death on May 20th.—The busiest practitioner would find but little difficulty in keeping such records, and their value, when grouped together in large numbers, would be exceedingly great. If, as I think it probable, it were found that there was a considerable difference between the experience of urban and rural practitioners, this would be a fact of considerable significance. The question of change of type in disease would probably be solved in half a century by steady per-

severance in such observations as I now advocate. The more diversified the sources from which our reports were obtained, the more valuable would be the general result. It would be of great interest to know in how far treatment was modified by climate, locality, &c.; whether, for instance, acute rheumatism should be treated in the same way in England, France, India, China, North America, and Australia. I think we should not at all despair of obtaining such reports, though they could not be procured so readily and directly as from our own associates. Even in our own island, however, there is quite variation enough of climatic condition to make it of much importance to know whether disorders of the same name and seat may not require to be dealt with very differently in different places.

Now thus far, at least as concerns what we may all of us do ourselves, there is evidently nothing impossible or very difficult in what I propose—nothing that requires any pecuniary outlay or special organization. All that I ask for is the systematic recording and reporting of certain large facts, about which, on the whole, there can be very little chance of material error. Each truthfully and carefully observed case may be used as a stone in erecting the edifice of Rational Medicine; nay, it cannot even be put aside, but must be ultimately included with others, and assigned to its proper place. Let anyone peruse the admirable writings of Dr. Gooch, and the cases he relates, and then say whether to the end of all time those records must not remain as an irrefutable testimony of the nature of puerperal disease which prevailed in his day, and of the treatment that was found efficacious to subdue it. If we had had the same careful, detailed, and precise records of other disorders, could we have had the statement uttered *ex cathedrâ* which we have heard in our own day—that acute disease is never curable by any depressing measures? I for one believe not. But I am anxious to avoid all discussion here, and would only press on your attention this truth—that it must be by the accumulation of details of evidence, by the bringing together and comparison of the experience of many observers, that we shall at length obtain foundation truths in medicine which we may hold as absolute and certain. If any are sceptical of the advantages which I look for from the work proposed, let me remind them that it is now well on in the nineteenth century, and that it is surely high time that a general effort, or something like one, should be made to solve the many problems which are continually pressing on us for solution. Daily we are called to act in cases where doubtful questions of practice present themselves. Should we not often feel it a relief if we had large, recent, well-tested experience to refer to on these very points? But if we are desponding of improvement and apathetic—if we attempt nothing, what future then can there be for us but to remain in uncertainty and discordancy regarding much, very much, which it certainly behoves us, if possible, to know clearly?

Let us only look at the way in which great excellence is obtained in other departments of labour. Think of the persevering night watches and laborious calculations of the astronomer—the hourly observations of the magnetic variations carried on for five years at Toronto, and the similar ones in many other places, even amid the rigours of a Polar winter. Think of the amounts of capital that are expended on machinery, on the constant efforts after improvement, and the determination to do everything in the very best possible manner which our manufacturers exhibit. The secret of their success is that they leave nothing undone which they can do, and so step by step they gain ground, and reach such perfection as we see displayed in the wonderful collection now so familiar to many of us. A Whitworth rifle or an Armstrong gun, marvels of accuracy and power, have not been constructed without the outlay of many thousands. These are implements for the destruction of life: can we boast that as much has been expended by national or combined effort to discover the means of its conservation? I do not say that the reproach of this rests on us as a profession—at least altogether; but I do say that it is clear enough that if we want great results, we must use corresponding means, and at any rate must not omit to exert all that lie in our power.

(To be concluded next week.)

DR. PRICE said, looking to the members of their Association and its organization, he was of opinion that the uses it was capable of performing had not been realized. They had not only branches and sub-branches, but very active and efficient secretaries, and every means of pursuing a much more active inquiry into the action of medicines than at present was undertaken. Looking to the great importance of the subject, he recommended that the Council should be requested, year by year, to draw up a series of questions upon the action of different medicines, or different modes of treatment, and send them to the members. By that simple means an amount of information might be obtained which would be of immense use, not only to the profession, but to the world.

DR. WEBSTER proposed that, instead of leaving the matter in the hands of the Council, a small committe should be appointed to draw up the resolution. He recommended immediate action, as if they merely discussed the matters and then separated without doing anything, they were in fact doing nothing. He therefore moved that a committee should be nominated to consider the subject.

DR. FARR seconded the proposal, and said the subject had been considered at the recent meeting of the Social Science Association.

MR. CROMPTON (of Manchester) suggested that a few gentlemen should be at once appointed, to devote an hour's careful consideration to the matter, as there were preliminary subjects that ought to be considered before they could even word the motion as to the therapeutic action of remedies.

SIR CHARLES HASTINGS moved, that Dr. Handfield Jones, Dr. Acland, Dr. Fleming, Dr. Farr, Mr. Samuel Crompton, Professor Bennett, Mr. Hodgson, Dr. Webster, and Dr. Harley should be appointed to act as a committee to report on the subject, and to bring it before the attention of the Association at the next sitting.

REMARKS ON A CASE OF WOUND OF THE SPINAL CORD.

BY E. BROWN-SÉQUARD, M.D., F.R.S.

An important paper was promised by Dr. Brown-Séquard on the above case, illustrative of the effects which he had previously demonstrated to follow division of the spinal cord in animals. Owing to great pressure of time, he condensed his remarks into the following form:—

Mr. Fillmore, captain of a vessel, was stabbed in the neck in the harbour of San Francisco, on the 19th of October, 1853, nearly nine years ago.

He lost his consciousness instantly, and fell. The loss of blood is said to have been very abundant, and the patient thinks he was saved from dying from the hæmorrhage by some one who pressed on the wound. He remained unconscious from the time of the stabbing (about eight in the evening) until the next morning. During the night he was a little delirious and feverish; but since then there has been no fever and no cerebral symptom.

On recovering his senses he found that he was completely paralysed on the right side, and partly also on the left side, from the neck downwards. His sight, hearing, and other head senses were all right; his speech was not affected; he could swallow without difficulty, and move any muscle of the eye and face; his breathing was easy; the pulse weak and slow; no vomiting; there was no incontinence of urine or fæces; but he had to hasten to pass his urine when the need was felt.

He remained in the same state for many days, almost in a fainting condition, but perfectly conscious, except for a short time, nine days after the accident, when, on seeing a friend, he fainted away completely for a little while.

For two or three months he was completely unable to turn himself in bed, and it was only after four months that he could stand a little on the left leg.

The wound, it seems, did not cause much pain, and healed pretty quickly. The movements of the head and neck became quite free as soon as the wound healed.

Slight symptoms of inflammation of a part of the right side of the cord—such as twitchings and jerkings, or trembling, with pricking and other kinds of pain—soon appeared after the accident, and still exist.

Gradually, but very slowly, the patient became better, and when I saw him for the first time, a year ago, he was in the following condition:—

His general health was pretty good. No symptom in any organ of the head and face except what I will mention in a moment.

The cicatrix of the skin is a little more than an inch long. It is at the upper part of the neck, on the left side, about an inch from the posterior surface of the skin; its direction is parallel to the axis of the body.

The right arm and leg are stiff and paralysed but incompletely; the left arm and leg have recovered their full power as regards motion.

As regards sensibility—

1st. The tactile sensibility is increased in the paralysed

lower limb, and very much diminished in the left limbs. In both the upper limbs there is a marked degree of anæsthesia.

2nd. The power of recognising the place where a tactile impression is made is lost in almost every part of the limbs which are not paralysed (the left limbs), and a little also in the upper limbs on the paralysed side.

3rd. The sense of tickling is very much increased in the paralysed limbs, and lost in the others. He burnt himself often without being aware of it.

4th. The sense of temperature (both for cold and heat) is lost in the non-paralysed limbs, and much exaggerated in the paralysed ones.

5th. The guiding sensations from muscles were lost in the paralysed limbs for some time, but have now returned.

*** A fuller report of this important case will appear in a subsequent number.

Dr. R. T. EVANSON read a paper on the use of iodine in the treatment of affections of the head in children.

A paper had been promised by Mr. C. H. MOORE, giving some account of a case in which extensive cancer was removed from the orbit, but on account of the lateness of the hour it was not read. The patient was in attendance, and Mr. Moore explained the case to some of the members at the close of the proceedings.

A paper was also read by Dr. HIGGINBOTTOM on the non-alcoholic treatment of disease.

Dr. Tindal Robertson was prevented from reading his paper on "Hydro-Therapeutics" in consequence of the sudden death of his father.

The proceedings were then adjourned.

Medical News.

ROYAL COLLEGE OF SURGEONS OF ENGLAND.—The following gentlemen, having undergone the necessary examinations for the diploma, were admitted Members of the College at a meeting of the Court of Examiners on the 31st ult.:—

Blasson, George John, Billingborough.
Bury, Henry Charles, Whetstone, Middlesex.
Chessman, Henry, Brighton.
Cobb, John Frederic, Norwich.
Forrest, John, Blackburn, Lancashire.
Hawkins, Henry Mortimer, St. Mary's-road, Peckham.
La Mert, Lewis, Bedford-square.
May, Lewis James, West Putford, near Bideford.
Murray, James, Belfast.
Norris, George Robert, Charmouth, Dorsetshire.
Owens, Henry, Croydon.
Phillips, Howell Charles, Trinity-square, Tower-hill.
Pooley, John, Huntingdon.
Rhodes, Charles, Addison-road, Kensington.
Ros, Edwin Hodgson, Eccles, near Manchester.
Sharpe, Henry John, Cornhill-road, Islington.
Simpson, Thomas, Boston, Lincolnshire.
Ward, Henry Leekamp, Horncastle, Lincolnshire.
Wesley, John Sebastian, the Close, Winchester.
White, John Gregory, Ampthill, Bedfordshire.
Wimberley, Conrad Christopher, Poplar Hospital.
Woodforde, Alfred, Plaistow.

The following gentlemen were admitted Members on the 1st inst.:—

Brereton, Alfred Henry, Bow.
Connolly, Joseph, Belfast.
Kranz, Melchior John Frederick, Melbourne, Australia.
Nelson, Charles Eugene, New York.
Noad, George William, Wokingham.
Partridge, Theodore D'Orville, York-place.
Prater, Charles Augustus, Woolwich.
Rayner, William, Stockport.

At the same meeting of the Court, Mr. JOHN KEVILLE SMALLHORN, of H.M.S. *Supply*, Woolwich, passed his examination for Naval Surgeon. This gentleman had previously been admitted a member of the College, his diploma bearing date October 29th, 1858.

APOTHECARIES' HALL.—The following gentlemen passed their examination in the Science and Practice of Medicine, and received certificates to practise, on the 31st ult.:—

Barker, Walter, Wantage, Berks.
Biddle, Charles Henry, Newcastle-on-Tyne.
Booth, Lionel, Greenwich.
Bury, Edward Charles, Wisbeach.
Godsicke, F. W. E'Reinhold, 4, Albert-terrace, Notting-hill.
Hawkins, Robert Richards, Martintown, Dorset.
La Trobe, Frederick Scott, St. Mary's Hospital.
M'Diarmid, Albert, 5, Newton-terrace, Rochester.
Mackelyne, Geo. Henry, Faringdon, Berks.
Nicholson, Robert Hicks Beauclerc, Hull.
Sedgwick, Hy. Nanton M., Antigua, West Indies.
Shepheard, Philip Candler, Erpingham, Norfolk.
Warrener, William, Woburn, Beds.
Waterworth, Charles Albert, Newport, Isle of Wight.
Wright, Frederick W., Launceston.

The following gentlemen also on the same day passed their first examination:—

Barker, William L., St. George's Hospital.
Blake, Edward Thomas, University College.
Butt, William F., University College.
Colborne, Anthony C., St. George's Hospital.
Cooper, Horace, St. George's Hospital.
Great Rex, Adolphus B., St. Bartholomew's Hospital.
Holman, Herman B., London Hospital.
Howes, F. C. P., King's College.
Newman, Anthony J., Middlesex Hospital.
Orton, George Hurst, St. Bartholomew's Hospital.
Salter, John Henry, King's College.

SOCIETY FOR THE RELIEF OF WIDOWS AND ORPHANS OF MEDICAL MEN IN LONDON AND ITS VICINITY.—At a recent general meeting of the members of this Society, it was announced that £977 had been distributed in half-yearly relief amongst forty-five families of its deceased members, besides £63 given in casual relief. Can we state any more valid reason why our readers, residing within the London District Post, should become members of the Society? Only two years' membership is essential before their families can receive relief. —The late Dr. Darling, of Russell-square, has bequeathed £100, duty free, to the above-named Society.

OBITUARY.—Dr. Traill, Professor of Medical Jurisprudence in Edinburgh University, expired in that city on Wednesday evening, the 30th ult. The learned Professor was born in October, 1781, and studied at Edinburgh University with Lord Brougham. For nearly thirty years he filled the chair of Medical Jurisprudence, and it is stated that, during that lengthened period, he was never absent from his lectures until 1861.

HEALTH OF LONDON DURING THE WEEK ENDING SATURDAY, AUGUST 2ND.—The weekly return continues to exhibit a comparatively favourable condition of the public health. In the week that ended last Saturday the deaths were 1209. In the ten corresponding weeks of the years 1852-61 the average number corrected for increase of population was 1275. Compared with this estimated amount, the deaths actually returned last week show a reduction of 66. Seventy-seven persons died from diarrhœa, of these 73 were children. Three deaths occurred from English cholera. The total deaths from all causes to the age of 20 were 644; between the age of 2[illegible] and 60, 355; at the age of 60 and upwards, 210. Four persons died of small-pox, 50 of measles, 59 of scarlatina, 68 of typhus, 158 of consumption, 20 of apoplexy. Disease of the heart and arteries was fatal in 34 instances, bronchitis in 55, and pneumonia in 50. Child-bearing was fatal to 5 mothers, 1 of whom died from metria.

The births were—boys, 928; girls, 866; total, 1794.

To Correspondents.

X. Y. Z.—1. We cannot conceive upon what grounds an action for neglect can lie, and it is obviously the duty of C. D. to protect him in every way from such a proceeding. In the case of Rich *v.* Pierpoint, the remarks of Chief Justice Earle, which appeared in THE LANCET of April 19th, p. 433, are most apropos to the case of A. B. Indeed we think that no other authority need be quoted. Should an action be brought, the summing-up of Justice Erle would or ought to be a complete and satisfactory defence.—2. There is no authority that can be quoted, we believe, against A. B. We shall be glad to be informed if any proceedings be taken in this matter. We shall not hesitate to "defend the interests of an humble member of the profession."

M.R.C.S.E.—He can be elected by the guardians; but it is doubtful whether the election would be ratified by the Poor-law Board.

Retired Indian Officer should refer to the recently published numbers of the *Madras Medical Quarterly* as "Bombay Transactions," in which he will find several papers upon the subject. Credit is chiefly due, however, to Drs Carter for the first explicit history of the disease. Dr. Bidie, who has lately written upon this very peculiar affection, denominates it "morbus pedis entophyticus." Our correspondent will find the work of Dr. Cellas, which he refers to, reviewed in one of the journals mentioned.

A Constant Reader.—There is much difference of opinion respecting the practice in such cases.

C. C. T.—Carbolic acid has been employed by Mr. Macdougall to deodorize the sewage of Carlisle. It has been also more recently used by the Board of Health of Exeter for a like purpose in the south.

Colonial Surgeon.—1. By application to the Duke of Newcastle, Secretary for the Colonies.—2. They vary in different localities.

A. E. S. E. will find the regulations in the Students' Number of THE LANCET.

A Real M.D., (Lancashire.)—At the present moment we think it would be injudicious to put the question propounded by our correspondent. In the event of any proceedings being taken, such an interrogation will form an important item in the cross-examination of the plaintiff. If the gentleman alluded to is sufficiently ill-advised to bring his assumed wrongs before a jury, there are many other questions that might be put to him which he would find great difficulty in answering satisfactorily.

A Patient.—Such cases are by no means uncommon, and are treated at all the hospitals in London and the country.

W. B. F.—Unless a specific contract were made to the contrary, B. would only pay a fifth part of the expenses; but it is usual in deeds of partnership to provide for such contingencies. In the absence of any specific clause in the agreement, we would advise the parties to the dispute to submit the case to arbitration, and by no means to make it a subject of litigation.

Senex.—It is a disputed question. It would be worth trying in a County Court. We think he would recover.

A Surgeon of Twenty-four Years' Standing should give his name.

PROFESSIONAL TITLES.

To the Editor of THE LANCET.

SIR,—Would you kindly permit me to offer a few observations, with reference to Mr. Maunder's letter, regarding professional titles, in your impression of the 19th ultimo?

While cordially concurring with that gentleman as to the propriety of instituting an obvious distinction between those members of our profession who choose to devote their sole attention to either of the three fundamental branches generally recognised as distinct, I am satisfied, however, that the hints thrown out by him are capable of somewhat greater generalization, especially in their bearing on the medical aspect of the question.

Now, throwing aside any consideration of country practitioners holding only one qualification, but who, nevertheless, must engage in the multifarious duties imposed upon them, I shall confine my remarks to those of whom Mr. Maunder makes more special observation—viz., hospital physicians and surgeons, and I may add practitioners of large towns in the aggregate, and shall endeavour to show how with them a greater refinement, consistent with equity, should be attained.

Mr. Maunder suggests that instead of the term "Mr." being prefixed to the name of the duly qualified practitioner in surgery, the word "Surgeon" should be substituted; and that the title "Dr." should appertain to the M.D., and the member (or licentiate, I presume) of a College of Physicians. As being one of the latter of these, I consider this an uncalled-for gratuity, and I deny that in justice the prefix "Dr." should be bestowed on or assumed by any other than a *bonâ fide* M.D., and this assertion I make on analogy with the grounds held by Mr. Maunder himself.

A surgeon is presumed to be either a Licentiate of a College of Surgeons or other legally constituted body, or a Master of Surgery of some University. He has, therefore, undisputed claim to the prefix "Surgeon," and is legally entitled to the exercise of the privileges conferred by this qualification. On the other hand, a physician is presumed to be a Licentiate of a College of Physicians, and is entitled only to the designation, Mr. ——, Physician, or if he choose, as Mr. Maunder suggests relative to the surgeon, he may prefix the word Physician, as is not unfrequently done in the north of England; while the M.D., who alone is Dr., (in our profession,) should accordingly be the only individual thus denominated. While this arrangement would satisfy the most fastidious, it would equally obviate the objections indicated by Surgeon Maunder, and I can see no reason why, with the discrimination here referred to, it should not be universally adopted.

If the Licentiate in Physic is encouraged to purloin the title "Dr.," then with equal justice may the L.A.C., the M.R., and especially the Licentiate of the Faculty of Physicians and Surgeons of Glasgow, and even the epicene quack, the L.M., each assert his claim.

Otherwise Mr. Maunder's letter meets with my entire approbation, and doubtless, on further consideration, even he will coincide with me in sustaining the claim thus urged.

I am, Sir, yours, &c.,
Oban, August, 1862. D. C. BLACK, M.D.

M. P.—Fine specimens of Sharp's engraving of John Hunter are now very rare. They may occasionally be picked up at sales of the effects of old members of the profession. The executors of the late Mr. Jones, of Jersey, have sent to London one or two very brilliant impressions, which are now in the possession of Mr. Stone, of the College of Surgeons, to be sold for the benefit of the widow.

J. W. L. should apply to a respectable surgeon.

Dr. George Moore, (Shelton.)—After the publication of such attacks on the profession as those contained in the "Report," Dr. Moore cannot be surprised that we decline to insert his letter.

R. S. P., (North Shields.)—Abstracts of most of the lectures delivered at the Royal Institution are published, and may be obtained by application to the Secretary.

THE CAUSES OF HEMORRHOIDS.

To the Editor of THE LANCET.

SIR,—A serious case of diarrhœa that has required much attention, must plead an apology for not answering the remarks by Dr. Evans on my letter in THE LANCET respecting disease of the lower part of the rectum, as I supposed, caused by the application of printed paper.

Dr. Evans wishes to know the treatment, and why the ladies are not so susceptible as the gentlemen. To the first question, in order to render the mucous membrane less liable to the disease, by giving it more tone, externally cold douche, shower-baths, or injections of cold water, with alum, pomegranate, sulphate of zinc, kino, logwood, lime water, gentle laxatives, and tonics. When in a state of irritation, warm fomentations external and internal, with starch and opium, hyoscyamus, cinnamon, gentle support with pressure by cammomile-flowers and poppy-heads well bruised. With regard to the second question, being rather a delicate point, I thought I was sufficiently explicit, and can only add that I knew a person that always visited the closet with a sheet of the best Bath post paper. Under these circumstances, the ladies may not patronize the printed paper so much as the gentlemen, or not be so severe in its application.

Your obedient servant,
Brompton-crescent, August, 1862. T. C. WOOD, M.D.

The Fees.—There is considerable doubt amongst lawyers on the subject. It would appear that the licence in question is an exceptional one. It is contended on the one part that it confers upon its possessor the legal right to assume the title of M.D. It is asserted with equal pertinacity on the other side that it gives no such privilege. Under these circumstances it remains for the judges to determine the legal construction of the clause in the Act of Parliament.

Dr. Ryding (Lymington) will get the information he desires on application to Mr. Davies, medical publisher, Princes-street, Soho.

Z.—The suggestion made is not novel, and the practice alluded to is one very frequently resorted to.

W. C. M.—The point is one that has been disputed with much acerbity, but hitherto with no decisive result. But a gentleman holding, not a "diploma," but a degree in medicine from any British University would not be guilty of any impropriety in so styling himself.

M.D., F.R.C.P., &c.—It is probable that the *right* has been assumed, and cannot be sustained. It is also probable that that *right* may be called in question on another occasion.

Subscriber (Leeds) will find the information he requires in any standard work on Diseases of the Skin.

Freeholder.—At the last election of a Coroner for the county of Somerset, the contest, rather a sharp one, terminated in a victory for the medical candidate.

THE TITLE OF "DOCTOR."

To the Editor of THE LANCET.

SIR,—Amongst the bye-laws of the Royal College of Physicians occurs the following:—

"No Fellow, Member, or Licentiate of the College shall assume the title of Doctor of Medicine, or use any other name, title, designation, or distinction, implying that he is a graduate in Medicine of a University, unless he be a graduate of Medicine of a University."

Now, Sir, here is a stringent rule to which every Fellow and Member of the College has sworn allegiance. What shall we say of such general practitioners who, without an academical degree, call themselves "Doctor" on being admitted Members of the College? I know several such persons, who not only put the prefix "Dr." on their doors, but publish books, announcing themselves as "M.D." on the title-page, in direct violation of the solemn oath they have taken when admitted. Are they aware that by another bye-law, any one who "has violated any statute, bye-law, or regulation of the College, relating to Fellows, Members, or Licentiates, as the case may be," is liable to a fine of £10, or may even by special authority be "degraded"? If this were more distinctly known, the absurd assumption of the academical and once honoured title of "M.D." by those who have no claim to it, would be made only by men without honour or principle.

I am, Sir, yours, &c.,
August, 1862. CENSOR.

L.R.C.P. Edin.—There are so many qualifications at the present time, that some allowance must be made for mistakes of the kind alluded to. It is of very little moment what title a man may assume; he can be made neither learned nor respectable merely by its possession.

A Doubly Qualified Candidate.—1. The medical qualification mentioned is not amongst those acknowledged as sufficient for a union surgeon. It is doubtful, however, if the guardians deemed it sufficient, whether the Poor-law Board would interfere.—2. He is doubly qualified.

A Mother.—It is not usual to circulate such testimonials.

L.S.A., (Walsall.)—The certificate may be obtained, if necessary, from any member of the College of Surgeons.

IN consequence of the length of our report of the British Medical Association, we are compelled to postpone the report of the Obstetrical Society, the analysis of Surgical Instruments at the Exhibition, our Parisian correspondent's letter, Mr. Hugman's communication on the "Mechanical Treatment of Hip Disease," Dr. Osborn on "Chlorine in Scarlatina," Dr. Inman's abstract, "Is Alcohol Food?" with many other important articles.

COMMUNICATIONS, LETTERS, &c., have been received from — Dr. Burrows; Mr. Hancock; Dr. Handfield Jones; Dr. Inman, Liverpool; Dr. Bond; Dr. Hughes Bennett; Mr. Laurence, (with enclosure;) Mr. Moore, Wakefield; Dr. Ryding, Lymington; Mr. Humphreys, Swansea; Mr. Mayhew; Mr. Steele; Mr. Bigg; Mr. Cresswell; Mr. Hind; Mr. Carruthers; Mr. Hare, (with enclosure;) Mr. Cottingham, Minster, (with enclosure;) Mr. Sumpter, Walsall, (with enclosure;) Dr. Stevenson, Burwash, (with enclosure;) Mr. Fryer, Bristol; Dr. Pratt, Oxford; Mr. Crofts, Kempsey, (with enclosure;) Mr. R. Cook, Newcastle; Messrs. Harney and Reynolds, Leeds, (with enclosure;) Mr. Wight, Bradford; Mr. Waddell, (with enclosure;) Mr. Oldman, Gainsborough; Mr. R. Bowie, Wakefield, (with enclosure;) Mr. Mumford, (with enclosure;) Dr. Lowe; Dr. Arnold, Belfast; Mr. Butterfield, York, (with enclosure;) Dr. Robertson, Nottingham; Mr. Moorman, St. Columb; Dr. Moaritz, Dublin, (with enclosure;) Dr. Moore, Shelton; Mr. T. Parsons, Leicester, (with enclosure;) Mr. Rake, Fordingbridge; Mr. Morton, Sutton, (with enclosure;) Dr. Trevor Morris; Mr. White, Erchfont; Mr. Watson, Dover; Mr. Cox, Brighton; Mr. Harkin, Belfast; Mr. Mansfield; Mr. Gell, Birmingham; Mr. Hordley, Etruria; Mr. Churchill, Poole, (with enclosure;) Mr. Kimpton; Dr. Martland; Mr. Robb, Stamford; Mr. Phillips, (with enclosure;) Mr. Reeves, Manchester; Dr. Clegg, Bacup, (with enclosure;) Dr. Fernandez, Isleham, (with enclosure;) Mr. Metcalfe, (with enclosure;) Dr. Higginbottom, Nottingham; Mr. O'Connell; Dr. Power; Dr. Mayburg, Richmond; Mr. Gascoyne; Mr. Kitching, Cape of Good Hope, (with enclosure;) Mr. A. Wright, Bradford; The Fens; M.D., F.R.C.P.; Chard Union; R. P.; W. C. M.; Medicus, (with enclosure;) L.S.A.; W. H.; M.R.C.S.; Censor; E.; Ignoramus; A Patient; A Real M.D.; Z.; R. E. S. E.; Senex Colonial Surgeon; E. C., (with enclosure;) J. W. H.; A Constant Reader A Mother; North Wales Lunatic Asylum, (with enclosure;) &c. &c.